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ABSTRACT

This document describes and analyzes the 1976-1977 Head Start Program Information Report (PIR) data. PIR is a comprehensive data collection effort directed at the programs of all Head Start grantees of which there were approximately 1,100 in 1976-1977. The unit of analysis in this study is the grantee rather than the agencies delegated by grantees to implement Head Start programs. The Head Start program descriptions are analyzed by PIR according to enrollment sizes, ethnic composition of staff and children, children's ages, average classroom sizes, staff/child ratio, and program costs. The resulting data are used to determine which program characteristics relate to program costs per child, what meaningful comparisons and contrasts among types or clusters of programs can be made, and what the statistical ranges in cost variations are. Also included in this document are the following areas of PIR information: organizational and geographic characteristics of grantees; health services information regarding Head Start children; food services, social services, and parent involvement information; funding received by grantees from different revenue sources and the costs incurred against such revenues. (Author/DB)

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HEAD START PROGRAM AND COST DATA ANALYSIS:

FINAL REPORT - VOLUME I

Under Contract No. HEW-100-77-0108

Submitted to:

OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION
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PREFACE

Volume I of the "Head Start Program and Cost Data Analysis Final Report" represents the study's analytical efforts to utilize data from the 1976/1977 Head Start Program Information Report (PIR). Volume II reports the results of analyses of data from "secondary" sources, i.e., sources other than the Head Start PIR data. Volume I is the primary thrust of this study, while Volume II represents more of an exploratory analysis of Head Start programs operating within a socioeconomic context.

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EXECUTIVE SUMMARY

The Executive Summary is comprised of two major sections:

- Background and Methodology
- Principal Findings

A. Background and Methodology

1. Principal Purpose of the Study

The principal purpose of the "Head Start Program and Cost Data Analysis" is to perform a descriptive and statistical analysis of the first wave *(1976/1977)* of Head Start PIR data. The PIR is the Head Start Program Information Report. It is a comprehensive data collection effort, directed at all Head Start grantees who receive grant awards from the Administration of Children, Youth, and Families (ACYF) to operate Head Start programs of their own and/or to delegate agencies for Head Start program operations.

For the full 1976/1977 operating year, approximately 1,100 grantees nationwide received such grants.

2. Overall Study Objectives

Major study objectives are to analyze overall descriptions of the Head Start program in terms of several characteristics such as enrollment sizes, ethnic composition of staff and children, ages of Head Start children, average classroom sizes, and the number of children served per staff member.

A major emphasis in the study analysis is to examine Head Start program costs in relation to program types and characteristics. Key study objectives encompass determining which program characteristics relate to program costs per child, what meaningful comparisons and contrasts among types or clusters of programs can be made, and what the statistical ranges in cost variations are.

3. Summary Description of the 1976/1977 PIR Data Base

The data base for this report was obtained through a survey of all Head Start grantees and delegate agencies for a 12-month operating period over 1976 and 1977. The Program Information Report (PIR) forms were mailed to Head Start programs who reported on certain operating aspects of their program. Only full-year Head Start programs were surveyed. (Summer Head Start programs are not included in the PIR reports.) These reports represent the first PIR data wave completed.

Approximately 1,500 grantees and delegates completed and filed the PIR survey form. The total of 1,500 respondents compares against an estimated universe size of 1,700 respondents. This represents a survey response rate of approximately *88 percent for Head Start programs.*

The unit of analysis in this study, though, is the grantee, in contrast to the survey respondent which consists of both grantees and delegate agencies. For grantees that have delegate agencies, the unit of analysis is obtained by aggregating the PIR data entries for the grantee and its respective delegate agencies. The 1976/1977 PIR data base contains 979 valid cases of grantees of which 170 cases are grantees who administered 520 delegate agencies.

The PIR form contains detailed quantitative information in a number of key Head Start program characteristics. The major areas of information relate to:

- Organizational and geographic characteristics of each grantee;
- Ethnic composition of children and staff participants in grantee programs;
- Amounts of funds received by grantees from different revenue sources and costs incurred against such revenues;
- Numbers of Head Start program centers, classrooms, and days of operation;
- Health services information in terms of numbers of children who completed health screenings, needed treatment, and received treatment;
- Number of children in terms of both planned enrollment and actual numbers served, ages, and length of participation in Head Start; and
- Food service, social services, and parent involvement information.

4. Non-response Rate for PIR Surveyed Grantees

The non-response rate for 1976/1977 PIR surveyed grantees is approximately *10.5 percent*, or 115 non-responding grantees out of a universe of 1,094 grantees. Key characteristics of non-respondents such as regional location and program size were examined for possible non-response bias in the reporting PIR data base. However, no significant non-response bias was identified.

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5. Reliability of the PIR Data

The 1976/1977 PIR data collection is the first wave of a comprehensive, universal data survey. The original PIR survey forms had numerous and extensive editing problems. Extensive manual and computer editing of the data resolved many of the data problems or at least made the data more amenable for analysis. (Throughout the text of the Final Report and in Appendix C, detailed discussions on the reliability and limitations of specific PIR items are presented.)

6. Development of Analytical Variables from the PIR Data Base

The analytical data file was developed by computing ratios or rates, additions, and percents from combinations of PIR items. The definition of analytical variables was based upon study questions, analytical objectives and statistical approaches, and our assessment of the quality of certain individual PIR items.

7. Analytical Approaches

Basic statistical measures including means, standard deviations, and frequency distributions are used throughout the study for several descriptive measures of the Head Start program. Averages are cross-tabulated for different categories of grantees according to key program organizational and geographic characteristics. Multiple regression analysis is utilized to examine relationships between cost per child measures and program operating and organizational characteristics.

Also, it should be noted that while the PIR forms represent both individual grantees and delegate agencies, the unit of analysis for this study is primarily the grantee. Thus, aggregation of the delegate agency forms is necessary to analyze the data at the grantee level of analysis. In addition, the degree to which grantees differed in the reliability of data across categories required the use of the reliable or "valid" number of grantee *cases* which could be used for an analytical variable.

Hence, the number of cases at the grantee level which are reliable reporting units will vary across different data items and variables.

Whenever the report uses a statistical table or figure for displaying data, the phrase, "Number of Valid Cases" will be shown. This refers to the number of grantees reliably reporting data for specific analytical variables.

8. Limitations to the Analysis

The availability of appropriate data and the suspect quality of the PIR survey data in certain instances were constraining factors. It should also be emphasized that while this study displays and assesses many dimensions and variations across Head Start programs, no attempt is made (or could be made within the study's framework) to control for variations in program quality, compliance, or impact on children.

B. Principal Findings

Section B of the Executive Summary reports the principal findings of the study in a question and answer format. The major topical headings covered in this summary are:

- Program Organizational and Geographic Characteristics of Head Start Grantees
- Characteristics of Head Start Children
- Characteristics of Head Start Staff
- Program Size of Head Start Grantees
- Child/Staff Ratios and Classroom Sizes
- Supportive Services Provided by Head Start Programs
- Cost Per Child Measures
- Cost Per Child Differences Across Program and Geographic Categories
- Factors Which Explain Cost Variations Among Individual Grantees
- Funding Sources for Head Start Programs

Program Organizational and Geographic Characteristics of Head Start Grantees

The study analysis determined the percent distributions of Head Start grantees according to key program organizational and geographic characteristics. Important distributional patterns are:

- The majority of the 979 reporting grantees (i.e., 65 percent) are CAA's (community action agencies), followed by "other" (26 percent), and schools (9 percent). "Other" consists of local governments, colleges, and private non-profit organizations.
- Among the grantees, 42.7 percent are located in SMSA's (Standard Metropolitan Statistical Areas) while 57.2 percent are in non-SMSA areas. However, 63 percent of the reported children served by Head Start are located in SMSA areas, compared to 37 percent for non-SMSA areas.

The higher percent of children actually enrolled in SMSA areas is attributed to larger Head Start programs in urban relative to rural areas.

Characteristics of Head Start Children

Relevant characteristics of Head Start children in this study include total numbers of children participating in the program, their ethnic status, ages, poverty and handicapped status, and length of participation in the program. Study questions and reported findings include:

1. How many children participated in Head Start for the 1976/1977 operating period?

   - The total reported number of children actually served by Head Start is 294,383 (based on 972 valid cases of reporting grantees) while the total planned enrollment is 271,447 (based on 975 valid cases).

2. What is the ethnic composition of Head Start children?

   - The overall percent of reported children served by Head Start who are of minority status* is 67.5 percent (i.e., 198,170 children out of a reported total of 293,585). The overall percent of 67.5 based on totals compares to a lower *average* of 50.5 percent of minority children *per grantee*. This discrepancy can be attributed to the fact that larger grantees have a higher percent of minority children.**

   - The predominant ethnic group for Head Start children is Black with 45 percent of the total number of reported children, followed by White (32.5 percent), and Hispanic (17.2 percent). Other ethnic groups comprise approximately five percent.

3. What are the ages of Head Start children?

   - The predominant age group for reported Head Start children are the four year-olds (55.4 percent or 162,260 children), followed by five year-olds and older (24.8 percent), and three year-olds and younger (19.8 percent).

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*Comprised of Black, Hispanic, Asian or Pacific Islands, and American Indian or Alaskan native.

**The larger grantee's data have a greater weight in the computation based on totals rather than the mean percent where all grantees have equal weight.

4. What are the poverty and handicapped status of Head Start children?

    - Approximately 13 percent of the reported children served by Head Start are handicapped while almost 93 percent are at or below the poverty level.

5. What percent of the children are in their first year of Head Start, and what percent in their first or subsequent year dropped out of the program?

    - Almost 72 percent of reported Head Start children (211,367) overall are in their first year of Head Start. A little more than 17 percent of all reported Head Start children (50,340) dropped out of the program.

Characteristics of Head Start Staff

Data on characteristics of Head Start staff available from the PIR pertain to total numbers of staff serving in Head Start, their ethnic status, and their degree status. Related study questions and responses follow:

6. How many staff who serve in Head Start grantees are ACYF-paid, and how many are paid from other sources?

    - The total reported number of ACYF-paid staff is 49,930 (for 956 valid cases), while the total number of staff paid in full by sources other than ACYF is 4,881 (for 901 valid cases).

7. How does the percent of ACYF-paid staff who are of minority ethnic status compare to the percent of Head Start minority children?

    - The percent ACYF-paid minority staff compares favorably with the percent minority children, based upon the ratio of percent minority staff to the percent minority children. The overall ratio is .924, or almost a one-to-one basis.

8. What is the degree status of ACYF-paid staff?

    - The percent of ACYF-paid staff with Child Development Associate (CDA) credentials is 2.3

percent overall. The percent of ACYF-paid staff with bachelor or advanced degrees in early childhood education is 7.7 percent overall. However, these percentages are based on total program staff and not just teaching staff. Therefore, the percents are skewed downward. Also, the PIR form only requests data for degrees in early childhood education.

Program Size of Head Start Grantees

9. What are average program sizes of Head Start grantees? By program type?

   - Head Start actual enrollment at the grantee level averaged almost 303 children. This average exceeded the planned enrollment average by about 25 children (although the actual enrollment figure includes dropouts).
   - Average enrollment for community action agencies is more than twice the average enrollment for schools; average enrollment for "other"* program auspice grantees is almost three times the average enrollment for schools.
   - Grantees with delegates have almost three times the average enrollment of grantees without delegates (although the former constitute only 17 percent of the reported cases of grantees).

Child/Staff Ratios and Classroom Sizes

Differences in child/staff ratios and classroom ratios across grantees are critical ones to know in understanding operational differences among grantees. Each Head Start classroom, for instance, typically has one teacher and one teacher's aide. How many children are in a classroom provides indication of child/staff contact. Ratios of children to teaching staff and classroom sizes may relate critically to other important areas of Head Start, such as performance standards and cost per child measures. Key study questions and answers in this regard are:

10. What are the overall averages in child to total staff ratios and child to teaching staff only ratios (exclusive of volunteers in the classroom)?

    - Overall average child/total staff ratios in Head Start programs are approximately 5.2 children per staff member, based on actual enrollment. The respective average for child/teaching staff

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*"Other" includes local government, colleges, private non-profit organizations.

(inclusive of teachers aides)is estimated to be 10.4 children per teaching staff member.

11. How do child/teaching staff ratios vary among program types?

    - Average child/teaching staff ratios are higher for schools (12.2), relative to community action agencies (10.4), or the "other" program auspice (9.6). The ratios are also higher for larger programs or for grantees with delegates (as opposed to grantees without delegates).

12. How large are average classroom sizes in Head Start programs? How much do classroom sizes vary according to program characteristics?

    - The actual number of enrollees per classroom for the 1976/1977 operating period was an *average* 22.5, while classroom size based on planned enrollment was 20.9. Classroom sizes, based on actual enrollment, display remarkably little variation by program characteristic though grantees with larger program sizes tend to have larger classroom sizes. Though classroom size, based on actual enrollment, for SMSA and non-SMSA areas varies only slightly, classroom size for regions ranges from 19.3 for Region II to 25.0 for Region IX.

Supportive Services Provided by Head Start Programs

Head Start programs provide many supportive services or activities to participating children and families, in addition to educational instruction. These services include the areas of health, nutrition, social services, and parent involvement. Measures of Head Start activities are obtained in this study by computing ratios of the numbers of activities (e.g., number of meals provided per day) to the number of children served by a grantee. Relevant study questions and answers are:

13. To what extent are Head Start programs providing health services to participating children?

    - The average grantee provides medical screening for about 90 percent of its enrollees served and dental screening for 85 percent of its enrollees. Almost 20 percent of enrollees served receive medical services, while almost 40 percent receive dental services. This pattern corresponds to the result that a larger proportion of children require dental treatment (44 percent) than medical treatment (24 percent).

14. To what extent are social services provided by or arranged through Head Start programs?

   - The average ratio of families provided social services directly by Head Start to enrollees served is .69, while the respective ratio for families referred to other agencies is .30. In other words, almost 70 percent of all families served received social services from the Head Start program, and 30 percent are referred to other agencies.

15. To what extent are food services provided to Head Start children?

   - The overall average number of meals served per day, per child, including breakfast, lunch, and dinner, is 1.17. Almost all programs serve breakfast or lunch. Approximately 61 percent of all meals served are lunch, and 36 percent breakfast (dinners make up less than one percent).

16. To what extent do the parents of Head Start children get involved in the program?

   - The ratio of volunteer parents to enrollees served is .67. (Alternatively expressed, 67 percent of Head Start families volunteer to provide support to Head Start.)

Cost Per Child Measures

Key cost measures in this study were computed on a per child basis, whereby a grantee's program costs are divided by the grantee's enrollment of children (i.e., actual enrollment in most instances and planned enrollment for comparative purposes). Key cost measures include: total cost per child served; ACYF cost per child served (exclusive of ACYF handicapped funding); ACYF handicapped funding per handicapped child; and USDA reimbursed food costs per child served. A key question is:

17. What are the overall averages for important cost per child measures?

   - The overall average value on total cost per child served (based on actual enrollment) is *$1,900.* The average ACYF cost per child served is *$1,446.* ACYF handicapped funding per handicapped child is $487. The average USDA reimbursed food costs per child served is $100.

Cost Per Child Differences Across Program and Geographic Categories

Significant cost variations across Head Start grantees can be found according to various program characteristics such as program auspice, agency organization, and the number of delegates which a grantee has. Important cost differences also exist by geographic location, including regional location and SMSA (Standard Metropolitan Statistical Area) status.

18. What are the important cost differences (or similarities) among different categories or types of programs?

    - For program auspice type, the "other"* category has the highest total cost per child served with a total cost figure of $1,972, compared to community action agencies ($1,874) and schools ($1,848).
    - ACYF cost per child served is $118 higher for community action agencies relative to schools, compared to a higher total cost per child served of only $26 for community action agencies.
    - Grantees with delegates have higher total or ACYF costs per child served than grantees without delegates.

19. What are the cost differences for different size programs?

    - Without consideration for other factors impacting upon costs, the optimal size for a grantee from a cost perspective appears to fall within the category of 251 to 500 enrollees where the average total cost per child served is a relatively low $1,776.

20. What are the differences for total cost per child served among federal regions and urban/rural categories?

    - Sizeable cost differences are evident across the ten federal regions plus IMPD (Indian and Migrant Program Division). The range varies from a low average of $1,482 in Region VI (which includes states in the south) to a high average of $2,651 in Region II (New York, New Jersey, and Puerto Rico).

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*"Other" includes local government, colleges, private non-profit organizations.

- Large cost differences are also evident for SMSA status, where the total costs per child are $167 higher in SMSA's than in non-SMSA's, or for city status, where the total costs per child are $189 higher in central city SMSA's than in non-SMSA's.

21. How do costs per child compare between part-day and full-day operations at the grantee level?

    - The overall total cost per child for full-day operations is $2,385, compared to $1,869 for part-day operations.

Factors Which Explain Cost Variations Among Individual Grantees

In addition to examining cost differences across different categories of programs, this study also analyzed the factors which explain or relate to cost per child variations among *individual* grantees. Multiple regression analysis, in particular, was utilized to assess the statistical significance of several cost-related factors. Relevant questions and answers in this regard are:

22. What are the most important factors (e.g., program operation, program characteristics, location) which can explain or relate to cost per child differences among Head Start grantees?

    - Three alternative cost per child measures (based on actual enrollment) are analyzed in the cost regression analysis. These cost measures are: total cost per child served; ACYF cost per child served (exclusive of ACYF handicapped funding); and ACYF cost plus non-federal share per child served. Factors which from a statistical standpoint have the greatest impact on the three respective cost measures are:

        - Child/total staff ratio or child/ACYF-paid staff ratio. (The level of statistical significance is higher for the child/total staff ratio relative to the child/ACYF-paid staff ratio.)
        - Regional teacher salaries.
        - Non-SMSA vs SMSA location of grantee (which corresponds to a rural/urban distinction).
        - Agency organization characteristic which identifies a grantee as either having delegate agencies or not having them.
        - Percent of ACYF-paid staff with CDA's or BA's in Early Childhood Education.
        - Total actual enrollment of the grantee.
        - Percent of children three years and younger.
        - Number of meals served per child per day.

23. How do cost factors relate to higher or lower costs per child among individual grantees?

- Higher costs per child served grantees are characterized by one or more of the following:
  - Low child/staff ratios.
  - Location in SMSA or urban (rather than rural) areas.
  - Location in regional areas where school teacher salaries are relatively higher.
  - Small program size.
  - Delegate agencies administered by the grantee.
  - Relatively higher percent of very young children (i.e., three years old or younger).
  - Relatively higher percent of ACYF-paid staff with credentials in Early Childhood Education.
  - Greater number of meals served.

More specifically, the following factors relate to cost variations as explained below:

- Child/staff ratios. Child/staff ratios, either in terms of total paid staff or ACYF-paid staff, have the strongest impact on cost measures, statistically speaking, of all the cost-related factors analyzed in this study. Higher child/staff ratios relate to lower costs per child served. Factors which affect higher child/staff ratios are:
  - Larger classroom sizes.
  - Fewer administrative staff in relation to total program enrollment.
  - Fewer support services personnel in a Head Start program (for services such as nutrition, health, transportation, etc.).

- Total program enrollment. Larger program sizes relate to lower total costs per child. This negative relationship still persists even after accounting for the lower costs attributable to the higher child/staff ratios in larger size programs. This result implies that costs for non-personnel resources such as building space, utilities, and equipment are lower per child for larger size programs.

- Regional teacher salary and non-SMSA vs SMSA location. The regional teacher salary variable, in terms of statistical significance, has a very strong impact on the cost measures. That is, regions with higher salary costs relate to higher Head Start costs per child served by grantees. The impact also appears to be stronger on the ACYF cost per child measure than on the total cost per child or ACYF plus non-federal shares per child measures.

Location of a grantee program in a SMSA or urban area relative to a non-SMSA or rural area relates to a higher cost per child served. This result is readily expected because of the generally higher cost-of-living in SMSA or urban areas relative to non-SMSA or rural areas. Hence, the combination of this variable and the regional salary variable in the regression equation effectively accounts for geographic differences in cost-of-living and teacher salaries.

- Agency organization. The higher cost per child of grantees with delegates may be attributable to additional resources required by a grantee to administer its delegate agencies. Grantees without delegates do not incur such administrative costs.

- Program auspice. Cost differences among grantees according to program auspice, (CAA's, schools, and "other") are statistically insignificant when the effects of other factors are accounted for.

- Percent ACYF-paid staff with degrees. An increase in the percent of ACYF-paid staff with CDA or BA degrees in Early Childhood Education relates to an increase in total cost per child served.

Funding Sources for Head Start Programs

Funding or revenue sources for Head Start programs encompass: ACYF grant awards; ACYF handicapped funding; non-federal share; USDA reimbursement for food; and "other" from other sources which are not part of the non-federal share. Pertinent study questions and answers for this topic are:

24. What are the relevant contributions for Head Start funding from alternative sources, including funding from ACYF?

    - The average size of an ACYF grant award per grantee for the 1976/1977 operating period is $383,000, compared to $375,000 for the previous operating period.

    - ACYF funds make up by far the largest percent of a grantee's total revenue with an average percent of 69 percent for the grant award and 71 percent inclusive of ACYF handicapped funds.

- The respective means or averages per grantee for other key sources of revenue include: $569,000 for *all* sources of revenue; $14,500 for ACYF handicapped funds; $105,000 for the federal share; $32,000 for USDA reimbursement of food costs; and $34,000 for state and local revenues (inclusive of Title XX monies) and other funding (inclusive of CETA funds).

25. How do the revenue contributions or percents vary by program category?

    - Overall, the revenue percents deviate very little by either program characteristic or regional location.

    - One program difference, though, is between schools, on the one hand, and CAA's and "other," on the other hand, with respect to the respective percents for ACYF funding and the non-federal share. Schools rely more on their non-federal share (23.3 percent) than either CAA's (18.4 percent) or "other" (17 percent). Also, the corresponding percent for ACYF funding for schools is lower (64.7 percent for schools vs 68.3 percent for CAA's or 68.6 percent for "other").

As a final note for the Executive Summary, this study and its findings represent the efforts of a complex undertaking in two major stages of development:

(1) Preparation of suitable analytical files from a comprehensive, universal data base which originally had numerous and extensive editing problems; and

(2) Performance of several and extensive analyses of the PIR data files.

The preparation itself of the analytical files for the first stage contributed significantly to methodological developments in the second stage. The 1976/1977 PIR data base still remains with several inadequacies (as discussed throughout the entire report), but it also represents a substantial beginning for successive waves of PIR data collection and analyses in the future.

CHAPTER I

BACKGROUND OF THE STUDY

A. Purpose of the Study

Head Start is a comprehensive child development program targeted primarily on poor preschool children and their families. The program provides a broad array of services to Head Start participants, including education, health, nutrition, social services, and parent involvement activities. Considerable variation exists among individual programs in terms of size, organizational arrangements, differing types of local operating agencies, costs, and several other characteristics. For the full year 1976/1977 operating period, approximately 1,100 grantees nationwide received grant awards from the Administration on Children, Youth, and Families (ACYF) to operate Head Start programs of their own and/or to delegate agencies for Head Start program operations.

Development of Ongoing Reporting System for Head Start Programs

For several years Head Start ACYF program managers have relied on ad hoc data gathering efforts and discrete, independently conceived cost studies to meet specific information needs. While these efforts have contributed to specific management decisions, they have not provided ACYF with either an ongoing analytic capability or a continuous data base relating program costs to program characteristics. Existing approaches to the utilization of available program and cost information about Head Start have therefore not provided a sufficient objective, empirical basis for making judgements concerning the relationships among program characteristics, costs, and other relevant factors.

As an important step towards meeting these management requirements, ACYF has developed the Head Start Program Information Report (PIR) survey instrument which is designed to collect data in a standardized format from the universe of local Head Start grantees. Although the PIR questionnaire does not cover information on every aspect of local operations, the PIR does provide a much more comprehensive and uniform description of local programs than is currently available from any other single operating instrument. In particular, the PIR provides the data base for relating cost information systematically to descriptive program information.

Overall Study Objective

The principal purpose of the Head Start Program and Cost Data Analysis project, which is the subject of this Final Report, is to develop the ongoing analytic framework to examine the PIR data and provide useful information for making programmatic and management decisions bearing upon current and future Head Start program operations. Hence, the purpose of this project is to conceptualize, design, and conduct analyses of the first year PIR data base.

Study Objectives

A major emphasis in the analysis of this study is to examine Head Start program costs in relation to program types and characteristics. Key study objectives encompass determining which program characteristics relate to program costs per child, what meaningful comparisons and contrasts among types or clusters of program can be made, and what are the statistical ranges in cost variations. Several important factors were identified as relating to cost measures, including child/staff ratios, regional salary differences, agency organization, urban vs. rural location, and enrollment size.

Other major study objectives pertain to providing overall descriptions of the Head Start program in terms of several characteristics such as enrollment sizes, ethnic composition of staff and children, ages of Head Start children, average classroom sizes, and the number of children served per staff member. Also, the analysis for this study coincides with recent activity in HEW to develop a set of "Performance Indicators" which measure several dimensions of the Head Start program. These indicators include cost per child measures, classroom size, medical services received by Head Start enrollees, number of meals served in a Head Start program, the level of social services provided, and several others. All of these measures are contained in the 1976/1977 PIR data base and are presented in this report. Several other performance indicators, though, are not contained in the PIR data base for the 1976/1977 operating period and so could not be addressed by this study.

The remainder of this chapter presents:

- Description of the PIR Data Base (Section B);
- Discussion of Empirical and Statistical Approaches (Section C); and
- Outline of the Final Report (Section D).

B. Description of the PIR Data Base

Organizational Relationships Among PIR Survey Respondents

The overall 1976/1977 PIR data base can be better understood within the context of organizational relationships among PIR survey respondents. The Administration for Children, Youth, and Families administered Head Start funds to approximately 1,100 grantees for the 1976/1977 operating period. The grantee is described as falling into one of three organizational categories:

- Grantees who operate their own Head Start program, plus administer Head Start funds to delegate agencies who operate programs as well.

- Grantees who do not operate any program of their own, but only administer funds to delegate agencies. These grantees are labelled in the report as "Central Office" grantees since they maintain central office staff only.
- Grantees who operate their own program, but have no delegates (labelled as "Grantee Only").

The generic term in this report for these categories is agency organization.

The grantee organizations consist of community action agencies (CAA's), schools, and "other." ("Other" consists of local government organizations, colleges, private non-profit, or any other organization not identified as a CAA or school.) The delegate agencies, which are administered by grantees, consist of schools or "other," except for a very small number which are CAA's. The generic term used in this report to describe these categories is program auspice.

Figure I-1 presents a schematic overview of these various organizational relationships. The top half of Figure I-1 describes the conceptual entities of grantee program auspice and operational structure. The bottom half identifies individual operating programs by program auspice. By way of example, a CAA Head Start grantee may or may not operate its own program and it may or may not have delegate agencies. If the grantee does not operate its own program, it will have one or more delegate agencies. Figure I-1 points to the overall complexity of organizational relationships among Head Start programs. It should be emphasized that the analyses in this report deal with a heterogeneous group of programs.

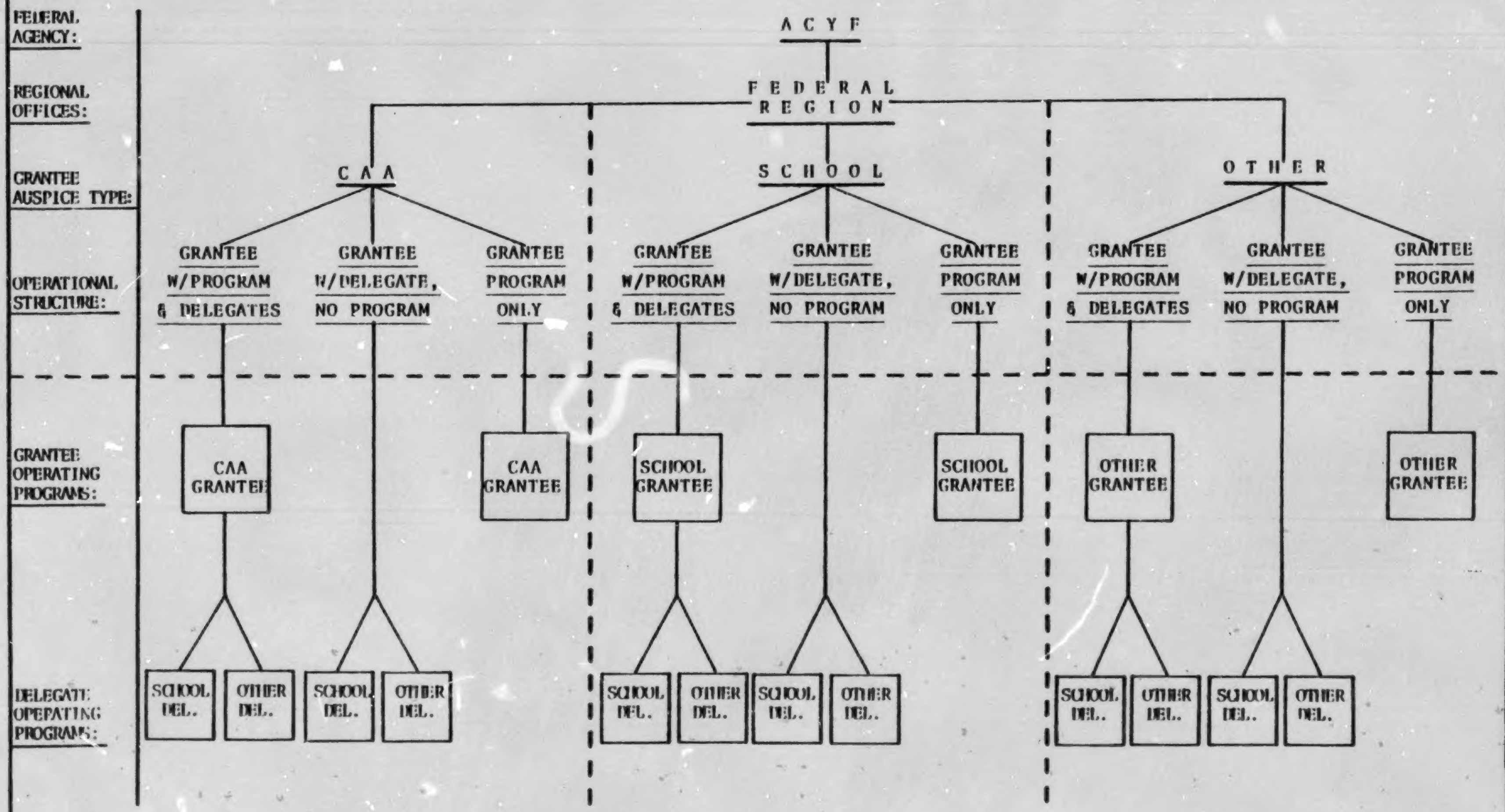
Unit of Analysis

The first year PIR data base covers the 1976/1977 operating period. The PIR survey form is designed to be completed separately by each local Head Start grantee and delegate agency operating full day or part day programs throughout the operating period. In addition, grantees which do not operate a program but delegate funds (labelled as "Central Office" grantees in this report) are required to provide PIR staff and cost information pertaining to their Head Start administrative activities. Approximately 1,500 grantees and delegates completed and filed the PIR survey form. The total of 1,500 respondents compares against an estimated universe size of 1,700 respondents.

The unit of analysis in this study, though, is the grantee, in contrast to the survey respondent which consists of both grantees and delegate agencies. For grantees that have delegate agencies, the unit of analysis is obtained by aggregating the PIR data entries for the grantee and its respective delegate agencies. The 1976/1977 PIR data base contains 979 valid cases of grantees of which 170 cases are grantees who administered 520 delegate agencies.

FIGURE I-1

HEAD START PROGRAM ORGANIZATIONAL RELATIONSHIPS


FEDERAL AGENCY:
REGIONAL OFFICES:
GRANTEE AUSPICE TYPE:
OPERATIONAL STRUCTURE:
GRANTEE OPERATING PROGRAMS:
DELEGATE OPERATING PROGRAMS:
A C Y F
F E D E R A L R E G I O N
C A A
S C H O O L
O T H E R
GRANTEE W/PROGRAM & DELEGATES
GRANTEE W/DELEGATE, NO PROGRAM
GRANTEE PROGRAM ONLY
GRANTEE W/PROGRAM & DELEGATES
GRANTEE W/DELEGATE, NO PROGRAM
GRANTEE PROGRAM ONLY
GRANTEE W/PROGRAM & DELEGATES
GRANTEE W/DELEGATE, NO PROGRAM
GRANTEE PROGRAM ONLY
CAA GRANTEE
CAA GRANTEE
SCHOOL GRANTEE
SCHOOL GRANTEE
OTHER GRANTEE
OTHER GRANTEE
SCHOOL DEL.
OTHER DEL.
SCHOOL DEL.
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The unit of analysis is defined as the grantee rather than the survey respondent because ACYF management control is exercised directly over the grantee but not over a grantee's delegates. The grantee is responsible for implementing Head Start policy and performance objectives. Also, the grantee (not the delegate agency) is the direct recipient of ACYF funds.

Percentage Distribution of Grantees by Program Characteristics and Geographic Location

A more complete understanding of the organizational millieu of the Head Start program can be attained by examining the actual distribution of grantees according to key organizational and geographic characteristics (see Appendix D for a listing of states by federal region). Tables I-1, I-2, and I-3 present the percent distributions of Head Start grantees (as opposed to respondents) according to program characteristics and geographic characteristics. Pertinent findings include:

- The majority of grantees are CAA's (65 percent), followed by "other" (26 percent) and schools (9 percent)*.
- A very high percent of grantees operate their own program without any delegates (83 percent or 809 grantees).
- Only 2.3 percent of the grantees (or 23 grantees) have more than five delegates.
- Approximately one-third of the grantees have 100 or less enrollees served by Head Start, while more than two-thirds have 250 or less enrollees.
- Almost half of the reported grantees are located in federal Regions IV, V, and VI. This corresponds closely with their percentage of the actual total of grantees from all regions.
- Among the grantees, 42.7 percent are located in SMSA** areas while 57.2 percent are in non-SMSA areas. However, 63 percent of the reported children served by Head Start are located in SMSA areas, compared to 37 percent for non-SMSA areas. The higher percent of children actually enrolled in SMSA areas is attributed to larger Head Start programs in urban relative to rural areas***.
- Region II has the highest percent of grantees in SMSA areas (61 percent) while IMPD has the lowest percent (19 percent).
- Regions II and VI have the highest percents of grantees which are CAA's, while Regions IV and VIII have the highest percent of grantees which are schools.

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* The corresponding percent for respondents are: CAA's - 42.8%; schools - 21.4%; "other" - 35.8%. These figures are based on 1,464 valid cases of respondents for this characteristic variable.

** SMSA: Standard Metropolitan Statistical Area.

*** Chapter III, Section A, examines the different program sizes of Head Start grantees in terms of enrollment sizes. The percent enrollment figures cited here are based on actual, as opposed to planned, enrollment.

TABLE I-1

PERCENTAGE DISTRIBUTION OF HEAD START GRANTEES BY KEY PROGRAM CHARACTERISTICS

	No. of Reporting Grantees[1]	% of Valid Cases[1]
Program Auspice		
Community Action Agency (CAA)	620	65.0%
School	90	9.4
Other[2]	244	25.6
No. of Valid Cases	954	100.0
Agency Organization		
Grantee Only	809	82.6
Central Office Grantee	90	9.2
Grantee with Delegates	80	8.2
No. of Valid Cases	979	100.0
Number of Delegate Agencies Administered by Grantee		
0	809	83.0
1	80	8.2
2-5	63	6.5
6-64	23	2.3
No. of Valid Cases	975	100.0
Program Size		
Less than 101 Enrollees[3]	316	32.3
101-250 Enrollees	364	37.2
251-500 Enrollees	173	17.6
Over 500 Enrollees	126	12.9
No. of Valid Cases	979	100.0
Total No. of Grantees in PIR Data File	979	100.0%

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[1] The entries for each characteristic variable exclude missing cases, as well as non-respondents. Hence, the total number of grantees for a given characteristic, such as program auspice, often does not add up to the overall total of 979 grantees. A non-respondent is defined here as a grantee whose PIR information does not appear at all in the PIR data file. A missing case refers to a particular PIR item which has been coded as "missing", i.e., actually missing or in error. A grantee may have its PIR represented in the data file, but some of its particular items are likely to be missing.

[2] Other includes local governments, colleges, private non-profit organizations.

[3] Enrollees served by Head Start (i.e., actual enrollment), as opposed to planned enrollment.

TABLE I-2

PERCENTAGE DISTRIBUTION OF HEAD START GRANTEES BY GEOGRAPHIC REGION

Federal Region	Regional Total		Grantees Located in SMSA[1] Areas		Grantees Located in Non-SMSA[1] Areas	
	No. of Grantees	% of Valid Cases	No. of Grantees	% of Region	No. of Grantees	% of Region
1	61	6.2%	31	50.8%	30	49.2%
2	69	7.0	42	60.9	27	39.1
3	102	10.4	52	51.0	50	49.0
4	186	19.0	70	37.6	116	62.4
5	160	16.3	78	48.8	82	51.2
6	132	13.5	51	38.6	81	61.4
7	56	5.7	19	33.9	37	66.1
8	47	4.8	17	36.2	30	63.8
9	53	5.4	31	58.5	22	41.5
10	48	4.9	15	31.2	33	68.8
IMPD[2]	65	6.6	12[3]	18.5	52[3]	80.0
TOTAL	979	100.0%	418	42.7%	560	57.2%

[1] SMSA: Standard Metropolitan Statistical Area.

[2] IMPD: Indian and Migrant Program Division.

[3] For one IMPD grantee there was no information on SMSA status.

TABLE I-3

PERCENTAGE DISTRIBUTION OF HEAD START GRANTEES BY PROGRAM AUSPICES BY REGION

Federal Region	Regional Total	Program Auspice					
		Community Action Agency (CAA)		School		Other 2/	
		No. of Grantees	% of Region	No. of Grantees	% of Region	No. of Grantees	% of Region
1	59	45	76.3%	2	3.4%	12	20.3%
2	66	53	80.3	4	6.1	9	13.6
3	100	67	67.0	11	11.0	22	22.0
4	181	116	64.1	30	16.6	35	19.3
5	154	117	76.0	11	7.1	26	16.9
6	129	107	82.9	10	7.8	12	9.3
7	54	40	74.1	4	7.4	10	18.5
8	47	16	34.1	8	17.0	23	48.9
9	52	24	46.2	6	11.5	22	42.3
10	48	27	56.3	3	6.2	18	37.5
IMPD 3/	64	8	12.5	1	1.6	55	85.9
TOTAL	954 1/	620	65.0%	90	9.4%	244	25.6%

1/ 25 grantess or 2.6% did not furnish information on Program Auspice.

2/ Other includes local governments, colleges, private non-profit, and other organizations not specified as CAA or school.

3/ IMPD: Indian and Migrant Program Division.

These findings provide a context for grouping or "clustering" programs for further analysis in the ensuing chapters of this report. Comparisons across such groups of programs are made on the basis of statistical means and other measures. The actual distributions of grantees can always be kept in mind when examining the various study results.

Brief Assessment of Possible Non-Response Bias

Approximately 200 respondents out of a universe of 1,700 (i.e., 11.8 percent) were identified as non-respondents. Alternatively, 115 grantees out of a universe of 1,094 (i.e., 10.5 percent) were identified as non-respondents. Tables C-2, C-3, and C-4 in Appendix C show the distributions of respondents and non-respondents by region, program auspice, and program size, respectively.

Region, program auspice, and program size were considered three key program characteristic variables for assessing possible non-response biases. Assessments are based upon comparisons of the percent distributions of survey respondents and the universe of possible respondents. From Table C-2 in Appendix C we find that the percent distribution of survey respondents by region corresponds closely to the respective distribution for the universe. Hence, there would appear to be little bias caused by misrepresentation of respondents by region. The Indian and Migrant Program Division (IMPD), though, has somewhat more underrepresentation than the other categories.

Very little non-response bias appears to be the case for the key program characteristic of program auspice (Table C-3). Schools, for instance, represent almost identical percents for both survey respondents and the universe. For program size, comparisons were made (Table C-4) for seven enrollment categories displayed in Table C-4 (less than 61 enrollees served, 61 to 120, 121 to 250, etc.). The results for program size again indicate little non-response bias that might be caused by misrepresentation for different program sizes.

It is impossible to rule out non-response bias along dimensions that are not measurable due to a lack of adequate information: for example, agency organization, number of delegate agencies administered by the grantee, SMSA status, or ACYF-paid staff levels. However, given the importance of the key dimensions which are examined here for possible non-response bias and their relatedness to other variables, we would expect little or insignificant bias in other variables.

Overall Assessment of the Reliability of 1976/1977 PIR Data

Original PIR survey forms had numerous and extensive problems. Entries were unacceptably out of range (e.g., 13 hours of classroom operation per day for a part-day program); entries did not add up to totals (e.g., total number of enrollees served did not equal the sum of enrollees by age category). Also, numerous items were inconsistent with each other (e.g. ,number of staff paid partly by ACYF funds exceeds total number of ACYF-paid staff). Non-response on applicable items was also a persistent problem.

Computational ratios were calculated as additional checks for editing the data. A computational ratio check is made by first combining two or more PIR items in calculating a ration and then determining if the ratio falls outside an acceptable range. One calculated ratio, for instance, is the number of children served, divided by the number of classrooms (i.e., classroom size). In 35 cases, it was found that the number of enrollees served per classroom (i.e., classroom size) exceeded the edit limit of 60. Perhaps the most serious problem with the 1976/1977 PIR survey was the lack of precise instructions for the respondents to follow and the lack of adequate definitions for requested data items.. A few items in the PIR form, in particular, were found to have a greater frequency of questionable entries due to this problem. These items are:

- Days of classroom operation (PIR Items 14C, 14E);
- Number of hours of classroom operation (14D, 14F);
- Average daily attendance (16A4); and
- Enrollment by program mode (16F).

Extensive manual and computer editing of the data resolved many of the data problems or at least made the data more amenable for analysis. Our overall assessment* of the present state of the PIR data is that most items in the PIR (except for the above four) are relatively free of systematic respondent error. Systematic error would be where the errors on a given PIR item follow a consistent pattern, such as entries being either too high or too low. Random errors would follow no consistent pattern. The random component error may be relatively larger than systematic error in the PIR data base due to poorly defined survey questionnaire items and the poor quality control on the initial collection and editing of the PIR data. The systematic type of respondent error is potentially a more serious problem than the random error in that it can lead to serious biases in the analytical results.

Throughout this report the percent of cases with "missing" (i.e., non-response or questionable items coded as missing) entries is reported for several variables. Typically, the percent missing is less than 10 percent and even less than 5 percent in many instances. The percent missing is generally higher the greater the number of PIR items combined computationally to create the analytical variable, due to the additive effect of including more missing cases across the PIR items.

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* It should be noted that Development Associates obtained the PIR data after it had been previously collected.

Reported figures of less than 10 percent missing may appear to be low and increase one's confidence in the reliability of the data. However, cases reported as valid may not always be totally accurate. Broad ranges or limits were exercised in our editing procedures in order to reduce the likelihood of excluding valid entries from the data base or recoding them as missing entries. Likely, in many instances, survey responses accepted as valid are imprecise or even inaccurate due to lack of instructions or other causes. It is difficult or impossible to identify such inaccuracies unless strict control in the collection of the data is exercised.

Appendix C contains a more detailed discussion of our assessment of the PIR data reliability.

C. Empirical and Statistical Approaches

Development of Analytical Variables

The raw 1976/1977 PIR data file contains almost 200 possible data entries per respondent or grantee. These entries pertain to numbers of staff, costs, enrollment, and services provided. Most of these entries correspond to line items in the PIR survey questionnaire form under "Part Day Program" and "Full Day Program" column headings. Background information on the characteristics of the grantee is also contained within each case file. (Appendix E contains the actual PIR questionnaire form used in the 1976/1977 survey.)

The analytical data file was developed by computing ratios or rates, additions, and percents from combinations of PIR items. The definition of analytical variables was based upon study questions, analytical objectives and statistical approaches, and our assessment of the quality (or lack thereof) of certain individual PIR items.

Part day and full day entries for each line item were added in order to obtain the aggregate entry for both part-day and full-day operations within a given grantee. Several ratio variables were calculated on the basis of per enrollee served (or planned), such as various cost per child measures and amounts of program services (e.g., meals, health services) provided per enrollee. Also, numerous percent variables were calculated which portray the percents or proportions for such descriptors as the ethnic composition of staff and children, ages of children, and sources of funding for Head Start programs.

The reader is referred to Appendix F for an extensive list of the analytical variables used in this study.

Descriptive Analyses

Much of this study is designed simply to describe the many dimensions and characteristics of Head Start programs. The PIR data base provides a wealth of quantitative information on Head Start staff and children characteristics, funding levels and costs by source, program operating characteristics, and supportive services. Aside from the actual statistics, the large numbers of descriptors point to the great diversity of Head Start programs. Statistical measures for these descriptors encompass frequency distributions, totals, means, medians, standard deviations, and minimum and maximum values.

An important approach in this study is to analyze program descriptors such as staff and enrollment characteristics, cost per child, and child/staff ratios by the key program and geographic categories identified earlier in this chapter. Program categories pertaining to program auspice and agency organization, for instance, provide a basis for grouping or clustering grantees for comparative purposes. The ten federal regions plus IMPD (Indian and Migrant Program Division) also provide a relevant basis for comparisons among grantees. The federal region categories gives recognition to geographic differences as well as the fact that the regional offices administer the program within their respective regions.

Statistical Testing

The study results are based on a near universe or census of survey respondents, rather than on only a sample drawn from the universe. Even allowing for an approximate non-response rate of 10 percent, the PIR data base is much more of a census than a sample.

The universal nature of the data base obviates the necessity for statistical testing, such as testing for significant differences among means or frequency distributions. One of the principle purposes of statistical testing is to draw inferences from the results of a random sample to the census. Since we have a near census of Head Start grantees, there is no need to draw inferences based on statistical significance tests from the near census to the entire census. The empirical results from the near census data base are directly generalizable to the entire census, especially since the near census data base contains very little non-response bias. The quality of the near census or census data, though, may be suspect in certain instances, as discussed previously in this chapter and later throughout the report.

A distinction should also be made between significant differences in a statistical sense and significant differences in a substantive sense. Large differences among means for various clusters of grantees, for instance, may be statistically significant, but the substantive importance of the differences will depend on non-statistical factors. These factors may pertain to policy relevance, study issues, and the reader's own judgement as to whether an observed difference is "significant" to overall policies or program management procedures.

Analysis of Relationships Among PIR Variables

Empirical techniques are utilized in this study in order to explore possible relationships among PIR variables. Regression analysis, in particular, is implemented to examine relationships between various program factors (e.g., program auspice, geographic location, program operating characteristics) and key criterion or "dependent" variables. A criterion variable is "dependent" in the sense that its statistical variation is to be explained by or related to variation in a set of explanatory or "independent" factors. For example, key criterion variables in this study are cost per child measures. Variation in cost per child variables across grantees is explained by where the grantee is located, its ratio of children to staff, program auspice, and other factors.

The tool of regression analysis is designed to assess whether or not relationships between variables are positive or negative and the magnitude of an independent factor's effect or relation on the dependent variable. The statistical tests associated with the regressions allow us to assess whether or not the degree of relationships between the dependent variable and each of the independent variables is statistically significant. In other words, the statistical tests indicate whether or not a relationship between the criterion variable and an independent factor exists and provides some indication of the strength of the relationship.

Regression analysis and other empirical techniques may be very useful for assessing relationships among variables or factors, especially in this study where the dependent variable is a cost per child measure. However, analytical tools do not necessarily prove casual relationships, where in a number of instances results may be simply of a coincidental nature. Also, the cost analyses in this report are not exhaustive in that many relevant factors or issues could not be fully addressed with the available data. For instance, the cost efficiency of a Head Start program may be largely affected by how the program is operated at the administrative level. Not only the composition of administrative staff, but also how administrative decisions are made may impact critically upon a program's costs. Qualitative aspects of decision-making process are often important but difficult to quantify.

D. Outline of Report

The remainder of this report presents the study's findings organized according to the following key topics (Chapters II through VI):

- Descriptive characteristics of Head Start children and staff (e.g., ethnic composition of children and staff, ages of children, proportion of staff with early childhood education credentials or degrees).
- Operating characteristics of Head Start programs (e.g., program size, child/staff ratios and classroom sizes, supportive program services).
- Description of costs per child and cost per child differences among Head Start programs (e.g., definition of alternative cost measures tabulation of cost measures by program characteristics).

- Analysis of factors related to cost per child measures (e.g., regression analysis).
- Analysis of Head Start funding levels and sources (e.g., percents of total funding for different revenue sources, ACYF handicapped funding per child, USDA reimbursement per child for food services).

Major sections or subtopics within each chapter encompass the following format:

- Statement of study objectives; identification of variables to be analyzed; and relevant factors not available for analysis.
- Definition of variables; statement on data reliability; and limitations in the analysis.
- Presentation of findings and conclusions.

CHAPTER II

DESCRIPTIVE CHARACTERISTICS OF HEAD START CHILDREN AND STAFF

Chapter II presents descriptive characteristics of Head Start children and staff for the 1976/1977 operating period, based upon available data from the PIR. This chapter is comprised of two major sections in which Section A addresses children characteristics and Section B addresses staff characteristics. Within each major section, the following topical areas are addressed:

- Study Objectives and Methodological Approaches;
- Definition of Variables and Data Qualifications; and
- Findings and Conclusions.

A. Characteristics of Head Start Children

1. Study Objectives and Methodological Approaches

Study Objectives

Study objectives with regard to characteristics of Head Start children pertain to providing descriptive information on ages, ethnic composition, poverty states, length of participation in Head Start, and other characteristics of the enrolled children. Study questions relevant to this topic include:

- At what ages are Head Start children first enrolled in Head Start and are there distinct patterns within program clusters or types?
- How many years do children participate in Head Start and are there significant differences in average daily attendance associated with geographic location of programs and program type?
- Does turnover of children enrolled over the course of an entire operating year vary by geographic location or program type?
- How many children who participate in Head Start come from families which are at or below the poverty level, and what is the ethnic composition of Head Start children?

The PIR data base lends itself readily to a straightforward descriptive analysis of the characteristics of Head Start children. Several items in the PIR provide numbers of children according to various ages, ethnic categories, poverty and handicapped status categories, and number of years of participation in Head Start. From this data, it is possible to compute respective proportions or percents. For instance, the age categories for children specified in the PIR are:

- 3 years old and younger;
- 4 years old;
- 5 years old; and
- 6 years old and older.

The respective percents of children according to these categories can be computed and compared with each other. The data on age distribution of Head Start children may have an important bearing on the key issue today of early treatment in childhood intervention. A predominant proportion of children being served by Head Start when they are, say, four and five years old rather than three years old may have important policy implications.

The length of treatment or extended treatment is another key issue in early childhood intervention. The PIR specifies the following two categories as a measure of length of participation:

- Number of children in their first year of Head Start; and
- Number of children in their second and subsequent years.

The number of "repeats" in the program may also have important policy implications as well as the ages of the children. In addition, Head Start is not only a child development program, but also a federal government program targeted primarily on disadvantaged preschool children and their families. As such, the poverty and handicapped status and the ethnic composition of the children are important characteristics to examine in this study. These data are treated extensively in Section A.

Methodological Approaches

Various descriptive approaches in utilizing the PIR data are taken in this study to fully describe the relevant characteristics of Head Start children. One approach is to present the PIR reported total numbers of children by federal region for:

- Overall number of children served;
- Number of children at or below the poverty level; and
- Number of children of handicapped status.

Numbers of children are also reported for other key variables including age, ethnic composition, and length of participation. The corresponding percents or proportions for these categories are computed to facilitate comparisons.

Two distinct approaches are adopted in this study to compute percents for the relevant characteristic categories. One approach is simply to use the aggregate or total numbers of children that fall into the specified categories. For instance, the percent of Head Start children who are three years old or younger can be computed by dividing the reported total number of children three years old or younger by the reported total number of children served by Head Start.

The other approach in computing percents is to arrive at an arithmetic mean or average. In this case, the unit of analysis is the grantee so that each grantee makes an equal contribution in computing the mean percent. The mean percents are computed by first summing each grantee's own percent value (e.g., percent of a grantee's children served who are three years old or younger) and then dividing the sum by the number of grantees. This method provides an analytic perspective based on individual program operations of the grantees as differentiated from the total reported number of children in Head Start.

The percent based on totals is not necessary to adequately interpret the significance of an average mean percent. The mean is a very basic measure of statistics and is perhaps the most commonly used one as well. It stands in its own right as an extremely effective tool for summarizing information from a data base. Mean percents and means for other variables for Head Start grantees are relevant for this study in that the unit of analysis for this study has been defined as the grantee. Percents based on totals are considered as a special procedure for comparative purposes in selected instances. For this procedure the unit of analysis is not the individual grantee, but the entire Head Start program as one observation.

Both mean percents and percents based on totals are presented together in the same tables for almost every percent variable addressed in Chapter II. Since the variables presented in Chapter II pertain to children and staff characteristics, percents based on totals provide a useful and meaningful addition to the analyses presented in this chapter. These particular percent variables give a picture of the overall direction of the Head Start program in terms of the participants' characteristics and are useful for legislative and other policy purposes. Beyond Chapter II though, the variables analyzed in this study, percent or otherwise, become more conceptual in nature and much more relevant at the individual grantee level. Child/staff ratios and cost per child measures, for instance, will vary dramatically from one grantee to the next and can be better understood in relation to other factors at the individual grantee unit of analysis. Hence, percent or other types of variables based on totals in chapters subsequent to Chapter II would be less meaningful.

The characteristics of Head Start children are further explored in this study by tabulating means according to the key program groups or clusters described in Chapter I. That is, grantees are grouped according to program auspice, agency organization, number of delegate agencies administered by the grantee, program size, and geographic location. Means for a given characteristic measure (e.g., percent of children of minority ethnic status) can be compared then for similarities and differences across the various program categories. For example, a key program grouping variable is program auspice, which includes the categories of community action agencies, schools, and others. Differences in mean percents across these categories can be examined by tabulating means according to program groupings or clusters.

2. Definition of Variables and Data Qualifications

Definition of Variables

Head Start enrollment of children falls into one of two categories which are:

- Planned enrollment; and
- Actual enrollment (or enrollees served).

Planned enrollment refers to the proposed number of children to be served in the grantee's application for ACYF funding. Actual enrollment refers to the number of children who enrolled and were served by the grantee, including children who may have dropped out of the program. Data on the characteristics of Head Start children (ages, ethnic composition, poverty status, etc.) are based on actual enrollment figures.

The following selective list of equations states the computational procedures for defining the variables analyzed and presented in this section. Reference to the PIR line items which are the basis for the data is made within the parentheses. For example, in the first equation, percent of children 3 years old and younger, the base data are reported in the PIR in items 16E1 and 16E5. Thus, to compute this equation, the data from 16E1 are divided by the data from 16E5. Reference to any of the PIR items is contained in Appendix E. (For a more exhaustive list of variables, the reader is referenced to Appendix F).

1. Percent* of children 3 years old and younger

   = [No. of children 3 years old and younger (PIR Item 16E1)] ÷

   [Total no. of children served (Item 16E5)].

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*Percent figures are obtained by multiplying 100% times the respective ratios.

2. Percent of children 4 years old and younger
   = [No. of children 3 years old and younger (Item 16E1) +
   No. of children 4 years old (Item 16E2)] ÷
   [Total no. of children served (Item 16E5)].

3. Percent of children of white ethnic status
   = [No. of children of white ethnic status (Item 16D1)] ÷
   [Total no. of children served (Item 16D6)].

4. Percent of children of minority etchnic status
   = [Total no. of children served (item 16D6) -
   No. of children of white ethnic status (Item 16D1)] ÷
   [Total no. of children served (Item 16D6)].

5. Percent of children who are handicapped
   = [No. of children above poverty line who are handicapped (Item 16B1a) +
   No. of children in poverty who are handicapped (Item 16B2a)] ÷
   [No. of children above poverty line (Item 16B1) +
   No. of children in poverty (Item 16B2)].

6. Percent of children in poverty
   = [No. of children in poverty (Item 16Ba)] ÷
   [No. of children above poverty line (Item 16B1) +
   No. of children in poverty (Item 16B2)].

7. Percent of children in their first year of Head Start

   = [No. of children in their first year of Head Start (Item 16C1)] ÷

   [Total no. of children served (Item 16C3)].

8. Percent of children who dropped out

   = [No. of children who dropped out (Item 16C4)] ÷

   [Total no. of children served (Item 16C3)].

Data Qualifications

Overall, the PIR data on children characteristics appeared to be fairly reliable. However, some editing problems were encountered and they should be noted.

PIR survey respondents were instructed to report numbers of children actually served for various characteristic categories. Enrollment entries, though, varied across respondents according to whether or not the respondent reported planned vs. actual enrollment, whether or not the enrollment figure included number of dropouts or not, and other causes. Inconsistent or non-matching enrollment totals within a PIR report occurred in approximately 27 percent of the PIR reports.

In particular, the total number of Head Start children actually served by a grantee can be obtained in PIR Items 16B, 16C, 16D, 16E, and 16F. The enrollment totals should match each other equally across these items for a given grantee. As indicated in the previous paragraph, several grantees did not report matching enrollment totals in their PIR survey forms. Furthermore, the number of valid cases on the subitems with each of Items 16B, 16C, 16D, 16E, and 16F (e.g., 16C1, 16C2, 16C3 are subitems within 16C) varied across grantees and within a grantee's PIR survey form.

Item 16C (length of participation) tended to have a higher percent of valid cases than any of the other actual enrollment items. Items 16D and 16E also had very high percents of reported valid cases. Item 16B (handicapped and poverty), though, was underreported by approximately 7.5 percent relative to the enrollment total for PIR Item 16C3. Item 16F (enrollment by program mode) had severe problems of inconsistency as well as underreporting, and therefore is not analyzed in this study.

As indicated previously, the subitems with the enrollment items 16B, 16C, etc., can be converted into percents. In this study the percents are based on using only those cases of grantees where all the subitems within a given item are reported and valid. For example, the respective percent for Item 16C1 is based on 957 valid cases, while the respective percents for the "handicapped" subitems for Item 16B are based on 908 cases.

In the text and tables on findings on children characteristics, reported numbers of children associated with a given characteristic are presented along with the percent figures. These reported numbers for a given subitem are based upon multiplying the respective percent times the total enrollment figure within a given PIR item (e.g., 16C, 16B, etc.).

The reported enrollment total for 16C is 294,383, while the reported total for 16B is only 279,026. Hence, comparisons across items on reported numbers of children enrolled should be exercised with caution. The percent figures, on the other hand, are highly reliable, and comparisons among them can be made more readily.

3. Findings and Conclusions on Characteristics of Head Start Children

This section of Chapter II is organized according to the following subtopics:

- Summary Description of Characteristics of Head Start Children;
- Description of Ethnic Status and Age of Head Start Children;
- Description of Poverty and Handicapped Status of Head Start Children; and
- Description of Length of Participation by Children in Head Start.

Summary Description of Characteristics of Head Start Children

Tables II-1 through II-3 present reported totals of Head Start children by federal region, comparison of average percents with overall percents based on totals, and descriptive statistics for key variables, respectively. The totals presented in Table II-1 are based on reported numbers for valid cases only, rather than an estimated total for the entire census of grantees. That is, no compensation has been made for non-responding grantees or for invalid cases within reporting grantees. The percent of total cases which are both reported and valid varies across variables and categories within variables (e.g., regional category), thereby hindering direct comparisons across the different totals reported in Table II-1. Reported totals throughout this study are based only on valid cases.

TABLE II-1

TOTAL REPORTED NUMBER OF CHILDREN IN HEAD START, BY FEDERAL REGION

	PLANNED[1] ENROLLMENT			ACTUAL[1] ENROLLMENT		
	Reported Total No. of Children	No. of Valid Cases[2]	Percent Missing of Universe[3]	Reported Total No. of Children	No. of Valid Cases[2]	Percent Missing of Universe[3]
Federal Region						
1	9,902	61	11.6%	10,282	60	13.0%
2	30,037	69	8.0%	33,471	69	8.0%
3	19,514	101	3.8%	20,035	100	4.8%
4	75,971	184	14.0%	79,322	184	14.0%
5	38,956	160	13.5%	41,790	158	14.6%
6	37,433	131	7.7%	43,006	132	7.0%
7	15,181	56	8.2%	16,957	56	8.2%
8	7,446	47	7.8%	8,320	47	7.8%
9	20,145	53	14.5%	23,162	53	14.5%
10	6,157	48	2.0%	7,091	48	2.0%
IMPD[4]	10,705	65	19.8%	10,947	65	19.8%
OVERALL TOTAL	271,447	975	10.9%	294,383	972	11.2%

---

[1] Planned enrollment refers to the proposed number of children to be served in the grantee's application for ACYF funding. Actual enrollment refers to the number of children actually served by the grantee, including children who may have dropped out of the program.

[2] The number of valid cases refers to the number of reporting grantees, as opposed to survey respondents (which include delegate agencies as well as grantees). Note, however, that the percent of total reported cases which are valid varies across variables and categories within variables (e.g., region), thereby hindering direct comparisons across the different totals reported in Table II-1.

[3] The universe consists of both respondents (979 grantees) and non-respondents (115 grantees).

[4] IMPD: Indian and Migrant Program Division.

TABLE II-2

COMPARISON OF MEAN PERCENTS AND PERCENTS BASED ON TOTALS, FOR CHARACTERISTICS OF CHILDREN SERVED BY HEAD START

Characteristics of Head Start Children	No. of Valid Cases	Mean Percent[1]	Percent Based on Totals
AGE, ETHNIC STATUS			
Percent of Children 3 Years Old and Younger	965	19.3%	19.8%
Percent of Children 4 Years Old and Younger	964	79.8	75.2
Percent of Children 5 Years Old and Older	963	20.0	24.5
Percent of Children of Minority[2] Status	964	50.5[3]	67.5[3]
HANDICAPPED, POVERTY STATUS			
Percent of Enrolled Children Who are Handicapped (irrespective of poverty status)	908	14.7	12.5
Percent of Children at or Below Poverty Level (irrespective of handicapped status)	941	91.6	92.9
LENGTH OF TIME IN HEAD START			
Percent of Children in Their First Year with Head Start	957	77.4	71.8
Percent of Children Who Dropped Out	933	15.8	17.1

---

[1] These percents are based on using the individual grantee as the unit of analysis. They are calculated as arithmetic means.

[2] Minority consists of "Black," "Hispanic," "Asian or Pacific Islander," and "American Indian or Alaskan Native" per the PIR survey form.

[3] As explained in the text, the discrepancy between the 67.5 percent and the 50.5 percent can be attributed to the fact that larger grantees tend to have a higher percent of minority children. Larger grantees have a greater weight in the percent based on totals, but only equal weight in the mean percent.

TABLE II-3

DESCRIPTIVE STATISTICS[1] ON CHARACTERISTICS OF HEAD START CHILDREN

Characteristics of Head Start Children	No. of Valid Cases	Percent Missing of 979 Grantees	Mean Percent	Median Percent	Standard Deviation	Minimum Value	Maximum Value
AGE, ETHNIC STATUS							
Percent of Children 3 Years Old and Younger	965	1.4%	19.3%	17.5%	16.5%	0.0%	98.7%
Percent of Children 4 Years Old and Younger	964	1.4	79.8	90.0	23.7	0.0	100
Percent of Children 5 Years Old and Older	963	1.6	20.0	09.7	23.6	0.0	100
Percent of Children of Minority[2] Status	964	1.6	50.5	53.4	35.0	0.0	100
HANDICAPPED, POVERTY STATUS							
Percent of Enrolled Children Who are Handicapped	908	7.3	14.7	12.6	7.8	0.0	60.0
Percent of Children at or Below Poverty Level	941	3.9	91.6	91.8	7.4	6.5	100
LENGTH OF TIME IN HEAD START							
Percent of Children in Their First Year with Head Start	957	2.2	77.4	81.6	20.0	8.3	100
Percent of Children Who Dropped Out	933	9.5	15.8	13.3	12.1	0.0	100

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] Minority consists of "Black," "Hispanic," "Asian or Pacific Islander," and "American Indian or Alaskan Native" per the PIR survey form.

A number of findings can be pointed out on the basis of Tables II-1 to II-3, including:

- The total reported number of children actually served by Head Start is 294,383 (based on 972 valid cases) while the total planned enrollment is 271,447 (based on 975 valid cases). The figures are based on PIR items 16C and 16A, respectively.

- The percent of reported children served by Head Start who are of minority status[1] is 67.5 percent (i.e., 198,170 children out of a reported total of 293,585 per PIR Item 16D). The overall percent of 67.5 based on totals compares to a lower average of 50.5 percent of minority children per grantee. This discrepancy can be attributed to the fact that larger grantees tend to have a higher percent of minority children. These larger programs have a greater weight in the computation based on totals, in comparison to the mean percent where all grantees have equal weight.

- 19.8 percent of reported Head Start children overall (57,992 children) are three years old and younger, while 75.2 percent (220,252) are four years and younger (per PIR Item 16E).

- Approximately 13 percent of the reported children served by Head Start are handicapped, while almost 93 percent are at or below the poverty level (per PIR Item 16B).

- The percent of reported children in poverty varies relatively little from one grantee to the next, while the percent of children who are handicapped varies much more.

- Almost 72 percent of reported Head Start children (211,367) overall, are in their first year of Head Start. A little more than 17 percent of all reported Head Start children (50,340) dropped out of the program (per PIR Item 16C).

Description of Ethnic Status and Age of Head Start Children

Figure II-1 and II-2 present the percents based on overall totals for the ethnic composition and different ages of Head Start children, respectively. The ethnic categories of Black, Hispanic, Asian or Pacific Islands, and American Indian or Alaskan native constitute "minority" ethnic status. Relevant findings from Figures II-1 and II-2 include:

- The predominant ethnic group for Head Start children is black with 45 percent of the total number of reported children (i.e., 132,113 children, per PIR Item 16D).

- The predominant age group for Head Start children are the four year olds (55.4 percent or 162,260 children, per PIR Item 16E).

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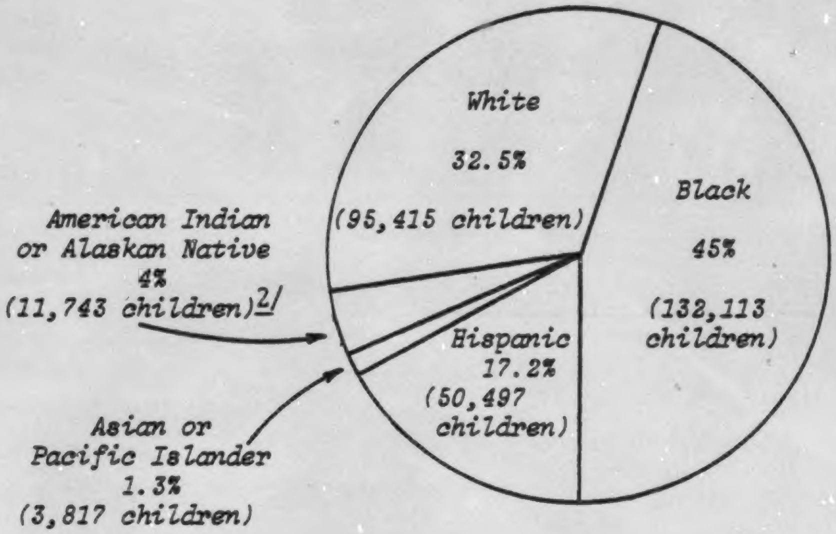
[1] Comprised of Black, Hispanic, Asian or Pacific Islands, and American Indian or Alaskan native.

FIGURE II - 1

PERCENT OF TOTAL HEAD START ENROLLMENT[1/] BY ETHNIC STATUS

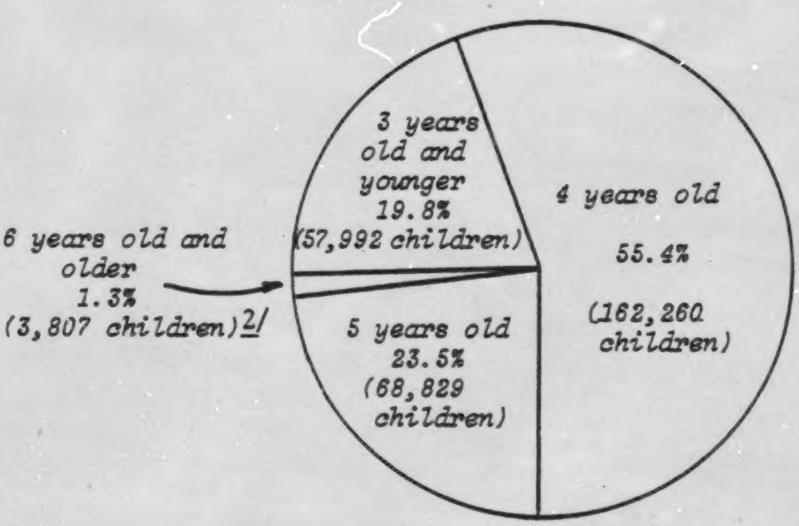


[1/] Enrollees served by Head Start as opposed to planned enrollment. Also, based on reported enrollment figures.

[2/] Number of children according to category are estimated by multiplying the respective percent times the overall reported total of 293,585 children served by Head Start based on 970 valid cases for 16D6.

FIGURE II - 2

PERCENT OF TOTAL HEADSTART ENROLLMENT[1/]
BY AGE



[1/] Enrollees served by Head Start as opposed to planned enrollment. Also, based on reported enrollment figures.

[2/] Number of children according to category are estimated by multiplying the respective percent times the overall reported total of 292,888 children served by Head Start based on 969 valid cases for 16E5.

Tables II-4 and II-5 present means for age and ethnic status variables according to program characteristics or clusters, geographic location, and classroom size. Findings include:

- The average percent of children of minority status is relatively* higher for the "other" program auspice, grantees with two or more delegates, and grantees with more than 500 enrollees.
- Average percent minority children vary widely across federal regions from a low of 20 percent for Region I to highs of 71 percent for Region VI and 92 percent for IMPD.
- Average percent of children three years old and younger is relatively higher for "other" program auspice and smaller programs. Also, the average percent of children three years old and younger is relatively lower for schools.
- A relatively high percent (26 percent) of children three years old and younger applies to the smallest classroom size category of 15 or less. Also, the percent of three years old and younger is higher in the classroom size category of 15 to 19.99 children per classroom relative to the 20 to 24.99 category.

This last result would appear to support the notion that classrooms with smaller sizes serve a greater percent of very young children. However, beyond the classroom size of 25, this pattern disappears. These results may be biased in one direction or another in that "classroom" is not equivalent to "class" and that "class" may be analytically a more relevant entity. Double session programs, for instance, can hold two classes in one classroom per day. (Chapter III addresses this question in greater detail.)

Description of Poverty and Handicapped Status of Head Start Children

Table II-6 and Figure II-3 present reported totals of children in poverty and handicapped children by region and the overall percentage distribution of children by poverty and handicapped status, respectively. Findings include:

- The reported total of Head Start children in poverty is 262,039, while the reported total for handicapped children is 34,658.

---

*Relative to the overall average or arithmetic mean.

TABLE II-4

AVERAGE VALUES OF AGE AND ETHNIC STATUS MEASURES OF HEAD START CHILDREN, BY PROGRAM AND GEOGRAPHIC CHARACTERISTICS

Program Characteristics	Percent[1] of Children of Minority Status[3]		Percent[1] of Children 4-Years and Younger	
	Mean Percent	No. of Valid Cases	Mean Percent	No. of Valid Cases
Program Auspices				
Community Action Agency (CAA)	47.3%	608	79.8%	609
School	44.4	90	73.9	89
Other[2]	60.4	241	82.3	241
Agency Organization				
Grantee Only	48.7	796	80.0	797
Grantee with Delegates	59.5	168	79.0	167
Number of Delegate Agencies Administered by Grantee				
0	48.8	800	80.0	801
1	54.5	79	78.5	79
2-5	60.0	62	81.5	61
6-64	72.5	23	71.0	23
Program Size				
Less than 101 Enrollees[6]	41.5	308	82.4	308
101-250 Enrollees	47.0	359	83.1	358
251-500 Enrollees	56.2	172	72.9	173
Over 500 Enrollees	75.1	124	73.5	125

Geographic Characteristics	Percent[1] of Children of Minority Status[3]		Percent[1] of Children 4-Years and Younger	
	Mean Percent	No. of Valid Cases	Mean Percent	No. of Valid Cases
Federal Region				
1	20.3%	58	88.2%	60
2	46.7	68	89.6	69
3	44.3	99	87.2	99
4	64.3	182	61.5	182
5	30.5	158	85.4	157
6	70.6	130	73.4	130
7	23.9	56	91.3	56
8	42.4	47	78.7	47
9	69.1	53	87.2	53
10	27.3	48	77.6	47
IMPD[4]	92.0	65	87.3	64
SMSA Status				
SMSA[5]	58.3	408	82.5	410
Non-SMSA	44.8	555	77.8	553
OVERALL AVERAGE	50.5%	964	79.8%	965

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] Other includes local governments, colleges, private non-profit organizations.

[3] Minority consists of "Black," "Hispanic," "Asian or Pacific Islander," and "American Indian or Alaskan Native" per the PIR survey form.

[4] IMPD: Indian and Migrant Program Division.

[5] SMSA: Standard Metropolitan Statistical Area.

[6] Enrollees served by Head Start, as opposed to planned enrollment.

TABLE II-5

AVERAGE VALUES OF PERCENTS OF ENROLLEES THREE YEARS AND YOUNGER, BY PROGRAM AUSPICE AND CLASSROOM SIZE

Characteristic	Percent of Children Served Three Years and Younger	No. of Valid Cases
Program Auspice		
Community Action Agency (CAA)	19.3%	609
School	14.4	90
Other[1]	21.0	241
Classroom Size[2]		
Less than 15 Enrollees	26.2	39
15 to 19.99	19.1	306
20 to 24.99	16.0	378
25 to 29.99	22.7	100
30 to 34.99	22.3	62
35 to 39.99	27.5	29
40 to 60.00	23.2	33
OVERALL AVERAGE	19.3%	965

---

[1] Other includes local governments, colleges, private non-profit organizations.

[2] Classroom size categories are based on number of children served (actual enrollment) per classroom.

TABLE II-6

TOTAL REPORTED NUMBER OF CHILDREN IN POVERTY AND HANDICAPPED CHILDREN, BY FEDERAL REGION

	CHILDREN IN POVERTY			HANDICAPPED CHILDREN		
	Reported Total No. of Children[1]	No. of Valid Cases	Percent Missing of Universe[2]	Reported Total No. of Children[1]	No. of Valid Cases	Percent Missing of Universe[2]
Federal Region						
1	9,121	61	11.6%	1,353	60	13.0%
2	30,323	69	8.0%	3,730	68	9.3%
3	18,373	98	6.7%	2,479	98	6.7%
4	69,281	178	16.8%	10,277	174	18.7%
5	38,827	153	17.3%	4,228	148	20.0%
6	35,671	125	12.0%	5,359	125	12.0%
7	15,433	54	11.5%	2,328	53	13.1%
8	7,188	46	9.8%	1,056	47	7.8%
9	21,755	53	14.5%	1,910	51	17.7%
10	6,229	47	4.1%	953	47	4.1%
IMPD[3]	9,838	63	22.2%	985	56	30.9%
OVERALL TOTAL	262,039	947	13.4%	34,658	927	15.3%

---

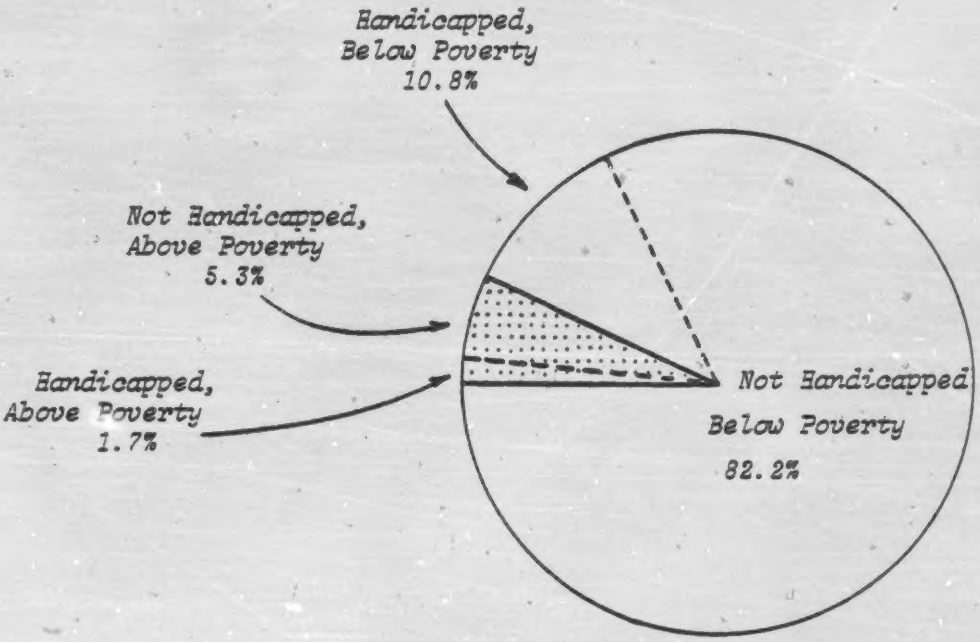
[1] Reported totals are based on the actual number of children served, as opposed to planned enrollment. The percent of total reported cases which are valid varies across variables and categories within variables (e.g., region), thereby hindering direct comparisons across the different totals reported in Table II-6. Moreover, the totals presented in this table are part of a multiple question (16B on the PIR form.) That is, to calculate an estimate of the percent of children who are in poverty, both 16B1 and 16B2 must be answered. Thus, while 947 grantees answered 16B2, only 941 grantees answered both. In order to calculate an estimate of the percent of children who are handicapped, all four parts of question 16B must be answered. However, only 908 grantees did this. The large discrepancies in reported valid cases among the four subitems of 16B make it difficult to calculate numbers of children for each subitem that correspond to the respective percents and add up to a common total. Part of the difficulty on 16B relative to the other enrollment items in that the subitem categories in 16B are not mutually exclusive of each other as they are for the other enrollment items. Also, no reported total was requested in 16B as it was for the other items.

[2] Percent missing of universe: invalid reported cases plus non-reported cases as a percent of the universe of cases (=1,094).

[3] IMPD: Indian and Migrant Program Division.

FIGURE II - 3

PERCENT OF TOTAL HEAD START ENROLLMENT[1] BY POVERTY AND HANDICAPPED STATUS



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[1] Enrollees served by Head Start as opposed to planned enrollment. Also, based on reported enrollment figures.

The information presented in this figure is from a multiple question (16B on the PIR form). That is, to calculate an estimate of the percent of children who are in poverty, both 16B1 and 16B2 must be answered. Thus, while 947 grantees answered 16B2, only 941 grantees answered both. In order to calculate an estimate of the percent of children who are handicapped, all four parts of question 16B must be answered. However, only 908 grantees did this. The large discrepancies in reported valid cases among the four subitems of 16B make it difficult to calculate numbers of children for each subitem that correspond to the respective percents and add up to a common total. Part of the difficulty on 16B relative to the other enrollment items is that the subitem categories in 16B are not mutually exclusive of each other as they are for the other enrollment items. Also, no reported total was requested in 16B as it was for the other items.

- 82.2 percent of the children served by reporting Head Start grantees are at or below poverty and not handicapped.* Another 10.8 percent of the reported total are both handicapped and at or below the poverty level.

- In considering only the children above poverty level, 24 percent of them were handicapped. For children at or below the poverty level only, almost 12 percent were handicapped.

Description of Length of Participation by Children in Head Start

Table II-7 presents means on the percent of children in their first year of Head Start and the percent who dropped out** by program cluster and geographic location. A lower percent of children in their first year of Head Start directly related to a greater percent of children in their second or subsequent year of Head Start. A higher percent of dropouts could have a number of different implications. Various implications might include a program in greater transition, a relatively greater number of children who drop out early in the operating year, or a greater number who do not remain in the program through the end of the operating year. Beyond suggestions of these different implications, it would be difficult for one to draw a more definitive or conclusive statement.

Findings from Table II-7 include:

- The percent of children in their first year is relatively*** higher for schools and smaller programs (less than 101 enrollees).

- The percent of children in their first year is relatively lower for Region IV and IMPD.

- The percent of children who drop out is relatively lower for schools and the smallest category for program size (less than 101 enrollees).

---

*In order to calculate an estimate of the percent of children who are in poverty, both PIR Items 16B1 and 16B2 must be answered. Thus, while 947 grantees answered 16B2, only 941 grantees answered both. In order to calculate an estimate of the percent of children who are handicapped, all four parts of question 16B must be answered. However, only 908 grantees did this. The large discrepancies in reported valid cases among the four subitems of 16B make it difficult to calculate numbers of children for each subitem that correspond to the respective percents and add up to a common total. Part of the difficulty on 16B relative to the other enrollment items is that the subitem categories in 16B are not mutually exclusive of each other as they are for the other enrollment items. Also, no reported total was requested in 16B as it was for the other items.

**Percent of "drop-outs" is defined previously in this chapter.

***Relative to the mean.

TABLE II-7

AVERAGE VALUES OF LENGTH OF PARTICIPATION BY CHILDREN IN HEAD START, BY PROGRAM AND GEOGRAPHIC CHARACTERISTICS

Program Characteristics	Percent[1] of Children in Their First Year of Head Start		Percent[1] of Children Who Dropped Out	
	Mean Percent	No. of Valid Cases	Mean Percent	No. of Valid Cases
Program Auspices				
Community Action Agency (CAA)	77.4%	607	15.6%	591
School	84.6	88	12.4	87
Other[2]	75.7	238	17.4	231
Agency Organization				
Grantee Only	77.6	792	15.7	771
Grantee with Delegates	76.9	165	15.9	162
Number of Delegate Agencies Administered by Grantee				
0	77.7	796	15.7	774
1	74.4	79	15.2	77
2-5	79.0	61	15.4	59
6-64	76.6	21	21.0	23
Program Size				
Less than 101 Enrollees[5]	81.5	305	14.7	293
101-250 Enrollees	78.7	363	16.1	353
251-500 Enrollees	76.8	168	15.7	167
Over 500 Enrollees	64.4	121	17.4	120

Geographic Characteristics	Percent[1] of Children in Their First Year of Head Start		Percent[1] of Children Who Dropped Out	
	Mean Percent	No. of Valid Cases	Mean Percent	No. of Valid Cases
Federal Region				
1	87.3%	60	16.0%	58
2	80.2	68	14.8	68
3	73.7	98	15.5	98
4	69.9	182	12.1	172
5	82.2	156	15.1	152
6	75.7	128	17.7	127
7	83.8	56	15.4	53
8	84.7	44	18.5	46
9	83.1	53	18.5	51
10	83.3	48	22.3	48
IMPD[3]	65.0	64	15.8	60
SMSA Status				
SMSA[4]	77.4	403	16.8	396
Non-SMSA	77.5	553	15.0	536
OVERALL AVERAGE	77.4%	957	15.8%	933

---

[1] Note the descriptive statistics presented were derived by using the individual grantee calculated percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] Other includes local governments, colleges, private non-profit organizations.

[3] IMPD: Indian and Migrant Program Division.

[4] SMSA: Standard Metropolitan Statistical Area.

[5] Enrollees *served* by Head Start, as opposed to *planned* enrollment.

B. Characteristics of Head Start Staff

1. Study Objectives and Methodological Approaches

Study Objectives

A study question initially raised for this study and pertaining to staff characteristics was:

- How does staff training/experience and level of professionalism vary across program type, within program type, and with respect to overall program costs and quality?

This study question could be addressed only partially on the basis of the PIR data. In particular, only the Child Development Associate (CDA) credentialed staff and staff with bachelor or advanced degrees in early childhood education are reported in the PIR. Other aspects of "staff training/experience" are not addressed in the PIR questionnaire. Another aspect of this would be, for instance, the number of staff currently in training for the CDA degree in early childhood education. This information could be used, for example, to compare how technical assistance and training are being applied across programs and regions. Other staff experience might include credentials other than the CDA or BA in early childhood education.

The aspect of the above study question pertaining to "level of professionalism" also could not be addressed on the basis of the PIR data. In particular, the functional category of staff according to administrator, teacher, teacher aide, clerical staff, and so on, are not specified in the PIR. A program's composition of staff by functional category would be expected to relate significantly, for one, to the program's costs, but this could not be analyzed.

However, the PIR does provide information on other aspects of staff characteristics. In particular, the PIR indicates whether or not staff are ACYF-paid and the ethnic composition of staff. Source of payment for staff may be somewhat reflective of the program's financial structure rather than staff characteristics per se. The ethnic composition of staff pertain to the same ethnic categories specified earlier for Head Start children.

Methodological Approaches

Straightforward, descriptive approaches which are used to describe characteristics of Head Start children are used to describe staff characteristics as well. These approaches include:

- Present reported total numbers of staff;
- Calculate overall percents of staff by source of payment (ACYF-paid or not), ethnic composition, and educational

credential. Base percents on aggregate or total numbers of staff by specified categories.

- Calculate statistical means for staff percents by program cluster and geographic location. Compare the means across program and geographic categories.

2. Definition of Variables and Data Qualifications

Definition of Variables

Variables which describe Head Start staff characteristics include: total ACYF-paid staff (PIR Item 8F); staff paid in full by sources other than ACYF (PIR Item 10A); percent of total staff which is ACYF paid; percent of ACYF-paid staff with minority ethnicity; and percent of staff with CDA's or bachelor's degrees in early childhood education.

This section also introduces a variable which measures the extent of ethnic "match or balance" between Head Start staff and enrollees. This variable is the percent of minority staff divided by the percent of children of minority status. A ratio of less (more) than 1.0 results when the percent minority staff is less (more) than the percent of minority children.

The following list of equations states the computational procedures for defining the variables pertaining to staff characteristics. Reference to the PIR line items is made within the parentheses. (For a more exhaustive list of variables the reader is referred to Appendix F.)

1. Percent[*] of total staff which is ACYF-paid

   = [No. of ACYF-paid staff (PIR Item 8F)] ÷

   [No. of ACYF-paid staff (Item 8F) + No. of staff paid in full from other sources (Item 10A)].

2. Percent of ACYF-paid staff of minority[**] ethnic status

   = [No. of ACYF-paid staff (Item 8F) - ACYF-paid staff of white ethnic status (Item 8A)] ÷

   [No. of ACYF-paid staff].

3. Ratio of percent minority staff to percent minority children

   = [Percent of ACYF-paid staff of minority ethnic status] ÷

   [Percent of children served of minority ethnic status].

---

[*] Percent figures are obtained by multiplying 100% times the respective ratios.

[**] Minority consists of Black, Hispanic, Asian or Pacific Islander, and American Indian or Alaskan native.

4. Percent of ACYF-paid staff with CDA's or bachelor's degree in early childhood education

   = [No. of ACYF-paid staff with CDA's (Item 9A) +

   No. of ACYF-paid staff with bachelor's degree in early childhood education (Item 9B)] ÷

   [No. of ACYF-paid staff (Item 8F)].

Data Qualifications

The PIR data pertaining to staff characteristics appear to be of good reliability, in that relatively few editing problems with respondents were encountered for these particular PIR items. However, limitations in the design of the questionnaire items themselves should be noted. They include:

- Numbers of staff should have been specified in "Full-Time Equivalent." Presently, in the PIR, part-time staff are counted equally as full-time staff.
- Ethnic composition and degree status of staff pertain only to ACYF-paid staff, rather than total paid staff.
- Educational levels or degreed staff are limited to CDA or degree in early childhood education.
- The distinction between which staff are ACYF-paid and which are not is lacking in definition. Interpretations may vary among grantees according to different accounting practices.

3. Findings and Conclusions on Characteristics of Head Start Staff

Findings and conclusions on characteristics of Head Start staff are presented according to:

- Summary description of characteristics of Head Start staff; and
- Description of Head Start staff according to ethnic composition, degree status, and source of payment.

Summary Description of Characteristics of Head Start Staff

Tables II-8 to II-10 present reported totals of Head Start staff by federal region, comparison of average percents with overall percents based on totals, and descriptive statistics for key variables, respectively. As for all other reported totals in this study, the totals presented in Table II-8 are based on the reported figures for valid cases only, rather than for the entire census of grantees.

TABLE II-8

TOTAL NUMBER OF PAID STAFF IN HEAD START, BY FEDERAL REGION

	ACYF-PAID STAFF[1]			STAFF PAID IN FULL BY SOURCES OTHER THAN ACYF		
	Reported Total No. of Staff	No. of Valid Cases[2]	Percent Missing of Universe[3]	Reported Total No. of Staff	No. of Valid Cases[2]	Percent Missing of Universe[3]
Federal Region						
1	1,963	59	14.5%	239	53	23.2%
2	6,596	66	12.0%	972	63	16.0%
3	3,927	98	6.7%	444	92	12.4%
4	14,251	184	14.0%	884	174	18.7%
5	5,786	154	16.8%	599	149	19.5%
6	5,900	129	9.2%	675	122	14.1%
7	3,018	55	9.8%	199	51	16.4%
8	1,535	46	9.8%	99	42	17.6%
9	3,745	53	14.5%	331	51	17.7%
10	1,278	47	4.1%	131	46	6.1%
IMPD[4]	1,931	65	19.8%	308	63	22.2%
OVERALL TOTAL	49,930	956	12.6%	4,881	906	17.2%

---

[1] ACYF-paid staff includes staff paid in part by ACYF, as well as staff paid in full by ACYF.

[2] The number of valid cases refers to the number of reporting grantees, as opposed to survey respondents (which include delegate agencies as well as grantees). Note, however, that the percent of total reported cases which are valid varies across variables and categories within variables (e.g., region), thereby hindering direct comparisons across the different totals reported in Table II-8. That is, while 956 grantees answered 8F, only 906 answered 10A. This inhibits one from summing the two values to obtain a picture of the total number of staff.

[3] Percent missing of universe: invalid reported cases plus non-reported cases as a percent of the universe of cases (= 1,094).

[4] IMPD: Indian and Migrant Program Division.

TABLE II-9

COMPARISON OF MEAN PERCENTS AND PERCENTS BASED ON TOTALS, FOR CHARACTERISTICS OF HEAD START STAFF

Characteristics of Head Start Staff	No. of Valid Cases	Mean Percent[1]	Percent Based on Totals
PERCENT OF STAFF BY SOURCE OF PAYMENT			
Percent of Staff which is ACYF Paid	906	89.8%	90.7%
ETHNIC COMPOSITION			
Percent of ACYF Paid Staff of Minority[2] Status	955	45.0%[3]	62.4%[3]
Ratio of Percent Minority[2] Staff to Percent Minority[2] Children	940	.874	.924
EDUCATION AND TRAINING			
Percent of ACYF Paid Staff with Degrees	895	11.2%	10.0%
Percent of ACYF Paid Staff with CDA Credentials	910	3.0%	2.3%
Percent of ACYF Paid Staff with BA in Early Childhood Education (or higher degree)	919	8.4%	7.7%

---

[1] These percents are based on using the individual grantee as the unit of analysis. They are calculated as arithmetic means.

[2] Minority consists of "Black," "Hispanic," "Asian or Pacific Islander," and "American Indian or Alaskan Native" per the PIR survey form.

[3] Similar to the instance of minority Head Start children, the discrepancy between the 45.0 and 62.4 percents can be attributed to the fact that larger grantees tend to have a higher percent of minority staff. Larger grantees have a greater weight in the percent based on totals, but only equal weight in the mean percent

TABLE II-10

DESCRIPTIVE STATISTICS[1] OF HEAD START STAFF

Characteristics of Head Start Staff	No. of Valid Cases	Percent Missing of 979 Grantees	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
SOURCE OF PAYMENT							
Number of ACYF-Paid Staff	956	2.3%	52.2	28.0	110.8	2	1,836
Number of Staff Paid In Full by Other Sources	906	7.5	5.39	1.76	15.6	0	324
Number of Volunteers	941	3.9	453.6	156.6	1,385.2	0	22,577
Percent of Staff which is ACYF Paid	906	9.3	89.8%	93.7%	12.6%	8.7%	100%
ETHNIC COMPOSITION							
Percent of ACYF Paid Staff of Minority[2] Status	955	2.5	45.0%	46.2%	34.0%	0.0%	100%
Ratio of Percent Minority[2] Staff to Percent Minority[2] Children	940	4.0	0.874	0.886	0.743	0.0	7.43
EDUCATION AND TRAINING							
Percent of ACYF Paid Staff with Degrees	895	8.6	11.2%	7.7%	12.0%	0.0%	80.0%
Percent of ACYF Paid Staff with CDA Credentials	910	7.0	3.0%	0.0%	6.5%	0.0%	43.8%
Percent of ACYF Paid Staff with BA in Early Childhood Education (or higher degree)	919	6.1	8.4%	4.8%	10.4%	0.0%	55.6%

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated percents. Thus, they represent the average percent per grantee and are not necessarily the same percents that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] Minority consists of "Black," "Hispanic," "Asian or Pacific Islander," and "American Indian or Alaskan Native" per PIR survey form.

Findings rendered by Tables II-8 to II-10 include:

- The total reported number of ACYF-paid staff is 49,930 (for 956 valid cases), while the total number of staff paid in full by sources other than ACYF is 4,881 (for 906 valid cases).
- The average number of ACYF-paid staff per grantee is 52.2*, while the average number of staff paid by other sources is 5.4. Half of the grantees, though, have less than 28 ACYF-paid staff, while the other half have more than 28 (i.e., 28 staff represents the median).
- The overall percent of ACYF-paid staff who are of minority status is 62.4 percent (i.e., 31,156 staff out of a reported total of 49,930). The overall percent of 62.4 percent based on totals compares to a lower average of 45 percent minority staff per grantee. As in the case of percent minority enrollment, the discrepancy here can be attributed to the fact that larger grantees tend to have a higher percent of minority staff. These larger programs have a greater weight in the computation based on totals, in contrast to the mean percent where all grantees have equal weight.
- The overall percent of ACYF-paid staff with CDA's or bachelor's degree in early childhood education is 10 percent (or 4,993 ACYF-paid staff).

With regard to degree status, note that the percents are based on all ACYF-paid staff, regardless of functional category. All ACYF-paid staff include clerical support, maintenance staff, and administrators as well as teaching staff. If from previous studies** we assume that teachers and other teaching staff who participate in the classroom (e.g., teacher aides) represent approximately half of the total staff, then the 10 percent figure for staff with degrees can be projected to 20 percent as a reasonable estimate of the percent of teaching staff with CDA or BA credentials.

Description of Head Start Staff for Ethnic Composition, Degree Status, and Source of Payment

Figure II-4 shows the overall ethnic composition of ACYF-paid staff, while Tables II-11 and II-12 present the average values or means for staff measures by program characteristic and geographic location, respectively. Findings include:

---

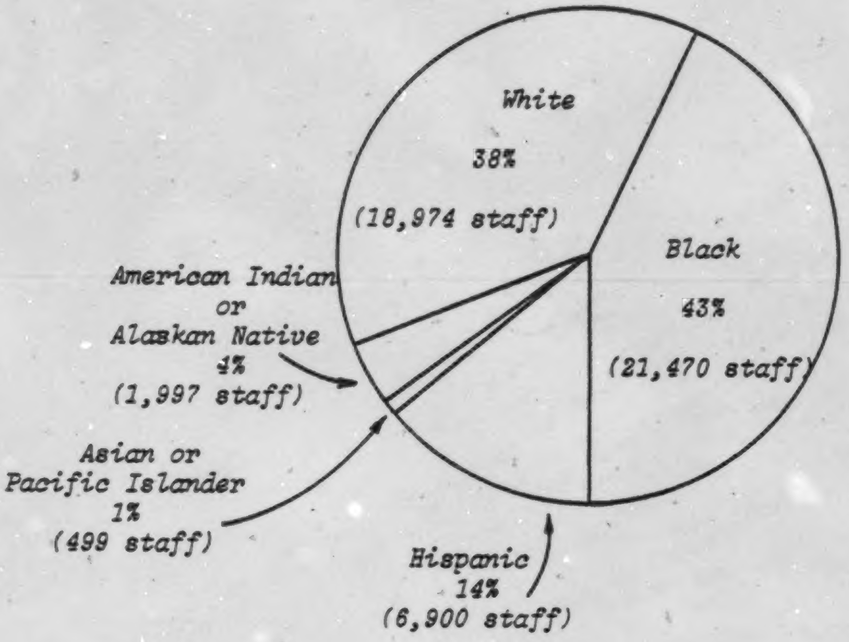
*This average is an arithmetic mean, obtained by summing numbers of staff across all valid cases and then dividing the sum by the number of valid cases.

**Sources: Executive Summary of a National Survey of Head Start Graduates and Their Peers, Abt Associates, March, 1979.

Project Head Start 1969-1970, A Descriptive Report of Programs and Participants, OCD, DHEW, July, 1972.

FIGURE II - 4

PERCENT OF ACYF PAID STAFF BY ETHNIC STATUS[1]



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[1] Number of ACYF paid staff according to category are estimated by multiplying the respective percent times the overall reported total of 49,930 ACYF paid staff.

TABLE II-11

AVERAGE VALUES OF STAFFING MEASURES, BY PROGRAM CHARACTERISTICS

	Percent[1] of ACYF Paid Staff		Percent[1] of ACYF Paid Staff with Degrees[2]		Ratio of % Minority Staff to % Minority Children	
	Mean Percent	No. of Valid Cases	Mean Percent	No. of Valid Cases	Mean Percent	No. of Valid Cases
Program Auspices						
Community Action Agency (CAA)	90.6%	575	9.7%	565	.875	593
School	89.7	85	19.0	83	.821	87
Other[3]	87.8	225	12.1	227	.892	237
Agency Organization						
Grantee Only	89.8	765	11.0	750	.863	793
Grantee with Delegates	89.6	141	12.3	145	.935	147
Number of Delegate Agencies Administered by Grantee						
0	89.8	769	11.0	754	.864	797
1	89.2	60	11.5	61	.981	62
2-5	90.7	55	12.1	58	.906	58
6-64	88.5	22	16.2	22	.889	23
Program Size						
Less than 101 Enrollees	88.2	288	13.7	277	.749	299
101-250 Enrollees	89.5	341	10.8	339	.870	353
251-500 Enrollees	91.2	157	08.8	156	1.048	167
Over 500 Enrollees	92.4	116	09.4	116	.959	120
OVERALL AVERAGE	89.8%	906	11.2%	895	.874	940

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] Degrees here consist of Child Development Associate (CDA) Credentials and Bachelor or Advanced Degree in Early Childhood Education.

[3] Other include local governments, colleges, private non-profit organizations.

TABLE II-12

AVERAGE VALUES OF STAFFING MEASURES, BY GEOGRAPHIC LOCATION

	Percent[1] of ACYF Paid Staff		Percent[1] of ACYF Paid Staff with Degrees		Ratio[1] of % Minority Staff to % Minority Children	
	Mean Percent	No. of Valid Cases	Mean Percent	No. of Valid Cases	Mean Percent	No. of Valid Cases
Federal Region						
1	87.3%	53	16.6%	52	.640%	56
2	86.5	63	14.6	63	.773%	65
3	88.8	92	10.0	91	.843%	95
4	92.7	174	8.9	173	1.004%	180
5	88.8	149	12.3	145	.878%	152
6	90.3	122	9.4	119	.979%	127
7	94.2	51	5.5	51	.887%	55
8	94.2	42	15.9	45	.730%	46
9	90.0	51	13.3	51	.933%	53
10	89.7	46	10.9	45	.605%	46
IMPD[2]	83.2	63	11.8	60	.886%	65
SMSA Status						
SMSA[3]	90.1	381	11.8	379	.903%	391
Non-SMSA	89.6	524	10.7	515	.854%	548
OVERALL AVERAGE	89.8%	906	11.2%	895	.874%	940

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] IMPD: Indian and Migrant Program Division.

[3] SMSA: Standard Metropolitan Statistical Area.

- The predominant ethnic group for Head Start staff is black with 43 percent of the total number of reported ACYF-paid staff (i.e., 43 percent or 21,470 ACYF-paid staff). Of the minority staff, 69 percent are black.

- Average percent of total paid staff who are ACYF-paid staff varies little from an overall average of 90 percent per grantee across program categories or geographic location.

- Schools have a relatively higher average percent of staff with degrees (19 percent) relative to CAA's (10 percent) or "other" program auspice (12 percent). Also, the average percent for this measure is higher for smaller size programs relative to larger programs. The notable exception to this latter result is that grantees with six or more delegates have the highest percent relative to grantees with fewer delegates.

- The ratio of percent minority staff to percent minority children is relatively higher for larger programs.

CHAPTER III

OPERATING CHARACTERISTICS OF HEAD START PROGRAMS

Chapter III describes the operating characteristics of Head Start programs for the 1976/1977 operating period, based upon available data from the PIR. This chapter contains three major sections:

Section A - Program Size of Head Start Grantees
Section B - Child/Staff Ratios and Classroom Sizes
Section C - Supportive Services Provided by Head Start Programs

The following topical areas are addressed within each major section:

- Study Objectives and Methodological Approaches
- Definition of Variables and Data Qualifications
- Findings and Conclusions

A. Program Size of Head Start Grantees

One important dimension of the operating characteristics of Head Start grantees is the size of the programs. As described in Chapter I, the unit of analysis is the grantee which includes its delegate agencies as well as its own program, if applicable. Program size can be described in terms of how many enrollees which a grantee and its delegates (if the grantee has any) are serving. Each grantee and delegate agency program operation may be serving children in one or more "centers," where each center consists of one or more classrooms. Program size, then, can be defined as the total number of enrollees across centers and agencies within a given grantee organization.

Additional operating characteristics which affect the overall magnitude of Head Start programs are the number of days of classroom operation throughout the year and the number of hours of classroom operation per day.

1. Study Objectives and Methodological Approaches

Study Objectives

Study objectives with regard to program size pertain to planned and actual enrollment levels and length of operation within the 1976/1977 operating period. Study questions relevant to this topic include:

- How large are grantee programs in terms of enrolled children and how do program sizes vary according to program cluster?
- How closely do "planned" and "actual" enrollment levels match against each other within individual grantees?
- How long do Head Start programs operate during the year and during an operating day?

Average program sizes may have significant variations according to different program clusters, such as program auspice (CAA, school, other), agency organization (grantees without delegates vs with delegates), federal region, and other program groupings. A further distinction with program size is the difference between a grantee's planned enrollment and its actual enrollment. As stated previously in Chapter II, planned enrollment refers to the proposed number of children to be served in the grantee's application for ACYF funding. Actual enrollment refers to the number of children who enrolled and were served by the grantee.

Methodological Approaches

The methodology on program size entails a simple, descriptive approach. Arithmetic means or averages per grantee are computed for both planned and actual enrollment levels. Other descriptive statistics include medians, standard deviations, and minimum and maximum values. The arithmetic means or enrollment levels are tabulated further according to various program clusters.

Additionally, the frequency distribution of grantees according to various program sizes is analyzed with the aid of histograms. The histograms show both the percent and number of grantees that fall within certain specified program size categories. The program size categories are chosen in such a manner to effectively display the statistical distribution of grantees by program size. Also, some subjective judgement in the choice of categories was made to establish reasonable distinctions among small, medium, large, and very large programs.

It is again emphasized that the unit of analysis is the grantee, which includes its delegate agencies. Overall enrollment totals for the entire Head Start program are presented in Chapter II.

2. Definition of Variables and Data Qualifications

Definition of Variables

For the topic area of program size, relatively little additional computations of analytical variables from the base PIR data were required. Analytical variables which encompass this topic area include:*

- Planned enrollment (16A3)
- Actual enrollment (16C3)
- Percent of total planned enrollment to be funded by ACYF
  = [Planned enrollment to be ACYF funded (16A1)] ÷ [Total planned enrollment (16A3)]
- Overenrollment
  = [Actual enrollment (16C3)] - [Planned enrollment (16A3)]

Data Qualifications

The data for planned enrollment levels should be very reliable, as they are also reported by grantees on their grant application forms. The data for actual enrollment is somewhat more problematical, even though almost all of the cases for this item are accepted as valid. Suspected problematical areas include the reporting of planned enrollment in place of actual enrollment where the two should not have been equal and the exclusion of drop-outs from reported actual enrollment totals. PIR respondents were instructed to include the number of drop-outs in their actual enrollment totals; however, our judgement is that this instruction was not followed consistently.

In a related vein, comparisons between planned and actual enrollment levels are limited. That is, planned enrollment figures presumably reflect numbers for "full-time equivalent" enrollees, but actual enrollment figures supposedly include drop-out children who constitute less than full-time enrollees. Also, since we do not know how long drop-outs typically remain in a program (the range can vary from dropping out on the first day to almost the last day of the program's operation), actual enrollment totals cannot be converted into full-time equivalent figures for comparison against planned enrollment figures.

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*Reference to the PIR line items is made within the parentheses.

In the manual and computer editing of the PIR data very few of the PIR items were rejected for analysis due to very poor quality. Items which were found to be unacceptable for analysis, though, included:

- Days of classroom operation (PIR Items 14C, 14E).
- Number of hours of classroom operation (PIR Items 14D, 14F).

Reasons for rejecting these items for analysis (see Appendix C for further details) include:

- Relatively high proportion of cases coded as "missing."
- Lack of clear PIR instructions for these items.
- Several instances of reporting days per week rather than days per year of classroom operation.
- Several grantees likely included "day care" time in addition to regular instruction hours or days.
- Numerous instances of reported figures falling outside of very broad ranges for tolerance limits.

3. Findings and Conclusions on the Program Sizes of Head Start Programs

Table III-1 presents descriptive statistics (mean, median, standard deviation) on four enrollment variables. Table III-2 tabulates the arithmetic means according to program and geographic categories for both actual and planned enrollment levels. Findings include:

- Head Start actual enrollment at the grantee level averaged almost 303 children. This average exceeded the planned enrollment average by about 25 children (although the actual enrollment figure includes drop-outs).
- Half of the Head Start grantees had actual enrollment levels greater than 154.6 while the other half had less than 154.6.
- In comparing average actual enrollment according to program auspice, figures indicate that the "other" auspice grantees have almost three times the average enrollment of schools. The average enrollment for CAA's is more than twice the enrollment for schools.
- Grantees with delegates have almost three times the enrollment of grantees without delegates (although they constitute only 17 percent of the reported cases).
- Grantees in Regions II, IV, and IX have the highest averages of actual enrollment while those in Region X have the lowest.

TABLE III-1

DESCRIPTIVE STATISTICS ON PROGRAM SIZE MEASURES

Variable	No. of Valid Cases	Percent Missing of 979 Grantees	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
Enrollment							
Planned Enrollment	975	0.4%	278.4	139.8	566.7	15	7,310
Actual Enrollment	972	0.7%	302.9	154.6	662.9	15	9,219
Percent of Total Planned Enrollment to be Funded by ACYF	973	0.6%	97.1%	100%	9.3%	23.2%	100%
Overenrollment*	970	0.9%	24.94	4.44	129.93	-290	2,082

*Overenrollment = [Actual Enrollment (16C3)] - [Planned Enrollment (16A3)]. Refer to text (Section A.2.) for a discussion on the limitations of this variable.

TABLE III-2

AVERAGE VALUES OF ENROLLMENT MEASURES OF HEAD START CHILDREN BY PROGRAM AND GEOGRAPHIC CHARACTERISTICS

PROGRAM CHARACTERISTICS	Actual Reported Enrollment		Planned Enrollment	
	Mean	No. of Valid Cases	Mean	No. of Valid Cases
Program Auspices				
Community Action Agency (CAA)	290	615	270	617
School	132	90	126	90
Other[1]	375	242	339	243
Agency Organization				
Grantee Only	227	804	210	807
Grantee with Delegates	665	168	605	168
Number of Delegate Agencies Administered by Grantee				
0	227	808	210	811
1	333	80	307	79
2-5	462	61	451	62
6-64	2,436	23	2,115	23
Program Size				
Less than 101 Enrollees	62	309	59	309
101-250 Enrollees	162	364	150	363
251-500 Enrollees	346	173	319	172
Over 500 Enrollees	1,243	126	1,128	126

GEOGRAPHIC CHARACTERISTICS	Actual Reported Enrollment		Planned Enrollment	
	Mean	No. of Valid Cases	Mean	No. of Valid Cases
Federal Region				
1	171	60	162	61
2	485	69	435	69
3	200	100	193	101
4	431	184	413	184
5	264	158	243	160
6	325	132	286	131
7	303	56	271	56
8	177	47	158	47
9	437	53	380	53
10	148	48	128	48
IMPD[2]	168	65	165	65
SMSA[3] Status				
SMSA	447	414	405	417
Non-SMSA	196	557	184	557
OVERALL AVERAGE	302.9	972	278.4	975

---

[1] Other includes local governments, colleges, private non-profit organizations.

[2] IMPD: Indian and Migrant Program Division

[3] SMSA: Standard Metropolitan Statistical Area

- Grantees located in an SMSA (Standard Metropolitan Statistical Area) have more than twice the average actual enrollment of grantees in the non-SMSA's.
- Differences in average planned enrollment levels among program clusters follow similar patterns to differences in average actual enrollment.

The distribution of grantees by program size category is presented in Figures III-1 and III-2 for planned enrollment and actual enrollment, respectively. Additionally, grantees with actual enrollment greater than 2,000 have been identified as "supergrantees." These supergrantees are individually described in Table III-3. Findings include:

- Eighteen (15.5) percent of Head Start grantees have planned (actual) enrollment of less than 61 children, while only 1.1 (1.3) percent have over 2,000 planned (actual) enrollees.
- More than 50 percent of the grantees have either planned or actual enrollment totals between 61 and 250 enrollees.
- The two largest grantees are one in Chicago, Illinois with 21 delegate agencies and an actual enrollment total of 9,219 children and one in New York with 64 delegates and 9,132 children served by Head Start.
- Most supergrantees have the "other" program auspice, while none are schools.

As mentioned previously, caution should be exercised in making direct comparisons between planned and actual enrollment levels. Planned enrollment figures refer to "full-time" enrollees only, while actual enrollment figures include drop-outs and other enrollees who participate only partially. The next section combines the above enrollment figures with numbers of staff and classrooms to obtain the key measures of child/staff ratios and classroom sizes.

B. Child/Staff Ratios and Classroom Sizes

Child/staff ratios and classroom sizes are key measures that effectively describe the operation of Head Start programs. Child/staff ratios are obtained by dividing enrollment levels by appropriate numbers of staff. Classroom sizes are obtained by dividing the grantee's enrollment by the respective number of classrooms.

FIGURE III-1

FREQUENCY DISTRIBUTION OF GRANTEES BY PLANNED PROGRAM SIZE

```
I
*******************  (n1/= 177)                      18.1 %
I   Less than 61 enrollees planned
I
**************************** (n = 261)              26.7 %
I   61 to 120 enrollees planned
I
I
**************************** (n = 259)              26.5 %
I   121 to 250 enrollees planned
I
I
******************* (n = 168)                       17.2 %
I   251 to 500 enrollees planned
I
I
******** (n = 72)                                    7.4 %
I   501 to 1,000 enrollees planned
I
I
**** (n = 27)                                        2.8 %
I   1,000 to 2,000 enrollees planned
I
I
** (n = 11)                                          1.1 %
I   Over 2,000 enrollees planned
I
* (n = 4)                                            0.4 %
I   Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500

                                  Frequency of Grantees
```

[1] The "n" denotes number of valid cases for a given program size.

FIGURE III-2

FREQUENCY DISTRIBUTION OF GRANTEES BY ACTUAL PROGRAM SIZE

```
I
**************** (n1/= 152)                  15.5 %
I  Less than 61 enrollees served
I
************************* (n = 233)          23.8 %
I  61 to 120 enrollees served
I
I
****************************** (n = 288)     29.4 %
I  121 to 250 enrollees served
I
I
****************** (n = 173)                 17.7 %
I  251 to 500 enrollees served
I
I
********* (n = 85)                            8.7 %
I  500 to 1,000 enrollees served
I
I
**** (n = 28)                                 2.9 %
I  1,001 to 2,000 enrollees served
I
I
** (n = 13)                                   1.3 %
I  Over 2,000 enrollees served
I
I
** (n = 7)                                    0.7 %
I  Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500

                                 Frequency of Grantees
```

---

[1] The "n" denotes number of valid cases for a given program size.

TABLE III-3

PROGRAM CHARACTERISTICS OF SUPERGRANTEES

Actual Enrollment	State	No. of Delegate Agencies	Program Auspice
2007	Texas	0	Other
2101	Arizona	0	Other
2500	Florida	0	CAA
2505	Mississippi	0	CAA
2728	New Jersey	6	CAA
2728	Texas	0	Other
2997	Missouri	1	Other
3143	Puerto Rico	6	Other
5304	Mississippi	0	Other
7548	Puerto Rico	17	CAA
8960	California	14	Other
9132	New York	64	Other
9219	Illinois	21	Other

1. Study Objectives and Methodological Approaches

Study Objectives

Study questions relevant to this topic include:

- Comparing across program types and comparing among programs within a given type, what are the ranges of variation in child/staff ratios?
- What are the ranges of variation in classroom sizes across program types?
- How well do variations in child/staff ratios and classroom sizes compare with each other across Head Start programs?
- What factors affect variations in child/staff ratios across grantees?

Differences in child/staff ratios and classroom ratios across grantees are critical ones to know in understanding operational differences among grantees. Each Head Start classroom, for instance, typically has one teacher and one teacher's aide. How many children are in a classroom provides indication of child-staff contact. Ratios of children to teaching staff and classroom sizes may relate critically to other important areas of Head Start, such as performance standards and cost per child measures. Chapter V, in particular, assesses the relationship between child/staff ratios and cost per child measures.

An important distinction is made between child/staff ratios and child/teaching staff ratios, where the former ratio includes all paid staff. The child/staff ratio is a more aggregate measure in that it includes not only teaching staff, but also service support staff, clerical support staff, and maintenance staff. For example, some programs may have cooks and cook aides in each center and therefore will reflect lower child/staff ratios compared to grantees where meals are provided through caterers or school lunch programs. Other programs may provide relatively more transportation services for their children and employ bus drivers while other programs may not provide transportation services. Thus, the aggregate measure of child/staff ratio can be useful since it relates directly to program cost and indirectly to program performance in some areas. The child/staff ratios of grantees can also be a critical variable in such key areas as administration, staffing, and support services.

The child/teaching staff ratio, on the other hand, pertains to teaching staff only. As such, this measure can be related specifically to the education component of the Head Start program (e.g., the child/teaching staff ratio can be related directly to measures of classroom size). The overall child/staff ratio has analytical usefulness for this study in that Head Start programs encompass much more than just an educational component. Other areas of Head Start program operations include health, nutrition, transportation, and social services. Child/staff ratios, therefore, may have important implications for overall performance and cost standards. Total costs per child measures, for instance, are likely to be affected more by child/staff ratios than by just child/teaching staff ratios.

Methodological Approaches

As in the previous Section A on program size, histograms are utilized to display the frequency distribution of grantees according to certain specified categories or ranges for child/staff (and child/teaching staff) ratios and classroom sizes. Categories or ranges for these measures are chosen in order to effectively demonstrate variations across grantees and distinguish among "low," "medium," and "high" categories.

Measures of number of children per center are computed as well as number of children per classroom (classroom size) for comparative purposes. Number of classrooms per center are computed for further description and comparison of program operations. Child/staff ratios and classroom sizes are computed on the basis of both planned and actual enrollment figures. Comparisons are facilitated by computing means or averages of the operating measures according to program clusters.

The question of which factors affect variations in child/staff ratios across grantees is investigated with the aid of regression analysis. In particular, the independent measures of classroom size and actual enrollment are related to the dependent variable, child/staff ratio. The regression equation allows us to assess how closely variation in the independent variable matches with the dependent variable's variation.

2. Definition of Variables and Data Qualifications

Definition of Variables

Analytical variables for Section B of this chapter are defined as follows:*

Child/staff Variables

a. Ratio of planned enrollment to total staff

= [Planned enrollment (16A3)] ÷ [Total staff (8A + 10A)]

b. Ratio of actual enrollment to total staff

= [Actual enrollment (16C3)] ÷ [Total staff (8A + 10A)]

---

*Reference to the PIR line items is made within the parentheses.

c. Ratio of planned enrollment to teaching staff
= [Planned enrollment (16A3)] ÷
[.5 multiplied times (8A + 10A)]

d. Ratio of actual enrollment to teaching staff
= [Actual enrollment (16C3)] ÷
[.5 multiplied times (8A + 10A)]

e. Ratio of actual enrollment to ACYF paid staff
= [Actual enrollment (16C3)] ÷ [ACYF paid staff (8F)]

Classroom Size Variables

f. Classroom size based on planned enrollment
= [Planned enrollment (16A3)] ÷ [No. of classrooms (14B)]

g. Classroom size based on actual enrollment
= [Actual enrollment (16C3)] ÷ [No. of classrooms (14B)]

Variables Pertaining to Head Start Centers

h. No. of classrooms per center
= [No. of classrooms (14B)] ÷ [No. of centers (14A)]

i. No. of children served per center
= [Actual enrollment (16C3)] ÷ [No. of centers (14A)]

Data Qualifications

The PIR data base does not provide information on numbers of teaching staff or staff by other functional category. Based on previous studies,* estimates of teaching staff are obtained from the PIR data by multiplying 50 percent times the total paid staff.

---

*Sources: Executive Summary of a National Survey of Head Start Graduates and Their Peers, Abt Associates, March, 1979.

Report on Head Start Cost Analysis, Development Associates, October, 1974.

Project Head Start 1969-1970, A Descriptive Report of Programs and Participants, OCD, DHEW, July, 1972.

This procedure provides an estimate of the level of teaching staff that can be used in computing child/teaching staff ratios. The result is that child/teaching staff ratios are double the child/staff ratios. However, patterns of statistical variation among grantees for the child/teaching staff ratio remain the same as they are for the child/staff ratio. This is because the adjusted teacher ratio is based on multiplying a constant factor (50%) times total staff to obtain the teacher/staff ratio. Hence, we can obtain an estimate of the level of child/teaching staff ratio, but the pattern of the statistical variation* (across, e.g., program cluster) remains that of the child/staff ratio, rather than the child/teaching staff ratio.

With regard to the classroom size measure, class rather than classroom would have been a more analytically useful entity. However, information on number of classes is unavailable from the PIR. Class refers to actual program instruction or operation going on, whereas classroom refers to the physical structure where classes are held. Double session programs, for instance, hold two classes in one day, but may have only one classroom for the two classes. Home-based models hold classes of Head Start children, but do not have classrooms per se. In spite of this qualification to classroom size, this measure is sufficiently reliable for descriptive purposes in this study.

3. Findings and Conclusions on Child/Staff Ratios and Classroom Sizes

Descriptive Statistics and Frequency Distributions

Table III-4 presents several descriptive statistics for the program operation variables defined earlier in Section B. The results from Table III-4 include:

- Overall child/staff ratios averaged out to be about 5.2 children per staff based on actual enrollment and 4.8 based on planned enrollment. The respective child/teaching staff ratios are double these figures.
- The actual number of enrollees per classroom was 22.5, while classroom size based on planned enrollment was 20.9.
- The average number of centers per grantee was 6.9, and the average number of classrooms per center was 2.2. The average number of children served per center was approximately 49.

---

*In statistical terminology child/staff and child/teaching staff rates will be perfectly correlated with each other (although the variances will differ by a constant factor).

TABLE III-4

DESCRIPTIVE STATISTICS[1] ON PROGRAM OPERATION VARIABLES

Variable	No. of Valid Cases	% Missing of 979 Grantees	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
Facilities/Enrollment							
Number of Centers per Grantee	976	0.3	6.91	4.12	16.5	1.0	374.0
Number of Classrooms per Center	961	1.8	2.23	2.0	1.46	1.0	13.5
Number of Children per Center	969	1.0	49.3	40.0	33.6	7.57	332.0
Number of Children per Classroom							
- Actual	954	2.6	22.5	20.9	7.11	6.0	57.5
- Planned	957	2.2	20.9	20.0	6.73	5.0	78.3
Child-Staff Ratios (planned)							
Planned Enrollment/Total Staff	904	7.7	4.81	4.57	1.7	0.88	13.3
Planned Enrollment/ACYF Paid Staff	952	2.8	5.48	5.08	2.8	0.89	62.0
Planned Enrollment/Total Teacher Staff [2]	904	7.7	9.61	9.13	3.3	1.77	26.7
Child-Staff Ratios (actual)							
Actual Enrollment/Total Staff	902	7.9	5.2	5.0	1.82	0.95	13.5
Actual Enrollment/ACYF Paid Staff	949	3.1	5.92	5.47	3.15	0.96	62.0
Actual Enrollment/Total Teacher Staff [2]	902	7.9	10.39	10.0	3.64	1.90	27.0

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Total number of teaching staff per grantee is estimated to be 50% of the total staff. This has the effect of doubling the total staff ratio.

Note also that if one can assume approximately two paid teaching staff members per classroom, an average classroom size of 22.5 relates closely to an average child/teaching staff ratio of 10.4. If we also assume that the third person in the classroom is a volunteer, then the child/teaching staff ratio is approximately 7.5.

Figures III-3 through III-8 present the frequency distribution of grantees for child/staff ratio and classroom size categories. The histograms in these figures are distinguished from each other according to planned enrollment vs actual enrollment and teaching staff vs all staff in the child/staff ratios. Results from these figures include:

- More grantees have overall child/staff ratios between 3 and 5 children per staff member than any other category, based on both planned and actual enrollment figures. The next category with a high frequency of grantees is the one between 5 and 7 children per staff.
- For child/teacher staff ratios, the category with the greatest frequency of grantees is between 6 and 10 children per teaching staff member, followed by the category of between 10 and 14.
- For classroom sizes based on planned or actual enrollment, the greatest frequency of grantees occurs for the size categories of 15 to 20 children per classroom (planned enrollment) and 20 to 25 (actual enrollment).

Average Values of Child/Staff Ratios and Classroom Sizes by Program Cluster

Tables III-5 and III-6 present means or averages for three measures of program operation by program characteristic and geographic location, respectively. Also, Table III-7 compares planned enrollment per classroom against planned enrollment per center. Among the findings are:

- Classroom sizes, based on actual enrollment, display remarkably little variation by program characteristic though grantees with larger program sizes tend to have larger classroom sizes. Though classroom size, based on actual enrollment, for SMSA and non-SMSA areas varies only slightly, classroom size for regions ranges from 19.3 for Region II to 25.0 for Region IX.
- Child/teaching staff ratios are higher for schools (12.2) relative to CAA's (10.4) or "other" (9.6). The ratios are also higher in larger programs or with grantees with more delegates.

FIGURE III-3

FREQUENCY DISTRIBUTION OF GRANTEES BY
CHILD/STAFF RATIO, BASED ON PLANNED ENROLLMENT

```
I
********** (n1/= 86)                                           8.8%
I   Less than 3 enrollees planned per staff
I
I
************************************************** (n = 455)
I   3 to 4.99 enrollees planned per staff                    46.5%
I
I
****************************** (n = 274)
I   5 to 6.99 enrollees planned per staff                    28.0%
I
I
********** (n = 89)
I   7 or more enrollees planned per staff                     9.1%
I
I
********* (n = 75)
I   Missing                                                   7.7%
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500

                              Frequency of Grantees
```

1/ The "n" denotes the number of valid cases for a given child/staff ratio. The numbers presented in this and subsequent figures are based on reported data.

FIGURE III-4

FREQUENCY DISTRIBUTION OF GRANTEES BY CHILD/STAFF RATIO, BASED ON ACTUAL ENROLLMENT

```
I
******* (n1/= 63)                                      6.4%
I   Less than 3 enrollees served per staff
I
I
*************************************** (n = 381)     38.9%
I   3 to 4.99 enrollees served per staff
I
I
*********************************** (n = 336)         34.3%
I   5 to 6.99 enrollees served per staff
I
I
************* (n = 122)                               12.5%
I   7 or more enrollees served per staff
I
I
********* (n = 77)
I   Missing                                            7.9%
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500

                                Frequency of Grantees
```

---

[1] The "n" denotes the number of valid cases for a given child/staff ratio.

FIGURE III-5

FREQUENCY DISTRIBUTION OF GRANTEES BY CHILD/TEACHING STAFF RATIO, BASED ON PLANNED ENROLLMENT

```
I
********** (n1/= 86)                                    8.8%
I   Less than 6 enrollees planned per teaching staff
I
I
********************************************** (n = 455)
I   6 to 9.99 enrollees planned per teaching staff  46.5%
I
I
**************************** (n = 274)                 28.0%
I   10 to 13.99 enrollees planned per teaching staff
I
I
********** (n = 89)                                     9.1%
I   14 or more enrollees planned per teaching staff
I
I
********* (n = 75)                                      7.7%
I   Missing
I
I........I........I.........I.........I.........I
0       100      200       300       400       500

                              Frequency of Grantees
```

---

[1] The "n" denotes the number of valid cases for a given child/teaching staff ratio.

FIGURE III-6

FREQUENCY DISTRIBUTION OF GRANTEES BY CHILD/TEACHING STAFF RATIO, BASED ON ACTUAL ENROLLMENT

```
I
******* (n1/= 63)                                              6.4%
I   Less than 6 enrollees served per teaching staff
I
I
*************************************** (n = 381)   38.9%
I   6 to 9.99 enrollees served per teaching staff
I
I
*********************************** (n = 336)       34.3%
I   10 to 13.99 enrollees served per teaching staff
I
I
************* (n = 122)                              12.5%
I   14 or more enrollees served per teaching staff
I
I
******** (n = 77)                                     7.9%
I   Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500

                              Frequency of Grantees
```

---

[1] The "n" denotes the number of valid cases for a given child/teaching staff ratio.

FIGURE III-7

FREQUENCY DISTRIBUTION OF GRANTEES BY CLASSROOM SIZE, BASED ON PLANNED ENROLLMENT

```
I
***** (n1/= 43)                                       4.4%
I   Less than 15 enrollees planned per classroom
I
I
****************************************** (n = 415)42.4%
I   15 to 19.99 enrolless planned per classroom
I
I
********************************** (n = 336)        34.3%
I   20 to 24.99 enrollees planned per classroom
I
I
******* (n = 62)                                      6.3%
I   25 to 29.99 enrollees planned per classroom
I
I
******* (n = 55)                                      5.6%
I   30 to 34.99 enrollees planned per classroom
I
I
*** (n = 16)                                          1.6%
I   35 to 39.99 enrollees planned per classroom
I
I
**** (n = 29)                                         3.0%
I   40 to 60 enrollees planned per classroom
I
I
*** (n = 23)                                          2.3%
I   Missing
I
I.........I.........I.........I.........I.........I
0       100       200       300       400       500

                              Frequency of Grantees
```

[1/] The "n" denotes the number of valid cases for a given classroom size.

FIGURE III-8

FREQUENCY DISTRIBUTION OF GRANTEES BY CLASSROOM SIZE, BASED ON ACTUAL ENROLLMENT

```
I
***** (n1/= 40)                                        4.1%
I   Less than 15 enrollees served per classroom
I
I
******************************* (n = 308)             31.5%
I   15 to 19.99 enrollees served per classroom
I
I
**************************************** (n = 381)  38.9%
I   20 to 24.99 enrollees served per classroom
I
I
*********** (n = 100)                                 10.2%
I   25 to 29.99 enrollees served per classroom
I
I
******* (n = 63)                                       6.4%
I   30 to 34.99 enrollees served per classroom
I
I
**** (n = 29)                                          3.0%
I   35 to 39.99 enrollees served per classroom
I
I
**** (n = 33)                                          3.4%
I   40 to 60 enrollees served per classroom
I
I
**** (n = 25)                                          2.6%
I   Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500

                              Frequency of Grantees
```

1/ The "n" denotes the number of valid cases for a given classroom size.

TABLE III-5

PROGRAM OPERATION MEASURES BASED ON ACTUAL ENROLLMENT BY PROGRAM CHARACTERISTICS

	Number of Children per Classroom		Child/Teacher Staff Ratio		Number of Classrooms per Center	
	Mean[1]	No. of Valid Cases	Mean[1]	No. of Valid Cases	Mean[1]	No. of Valid Cases
Program Auspices						
Community Action Agency (CAA)	22.7	603	10.433	572	2.090	608
School	21.9	88	12.189	85	2.593	88
Other[2]	22.3	239	9.598	224	2.339	241
Agency Organization						
Grantee Only	22.1	787	10.179	761	2.220	792
Grantee with Delegates	24.4	167	11.550	141	2.255	169
Number of Delegate Agencies Administered by Grantee						
0	22.1	791	10.173	765	2.215	796
1	23.2	79	10.798	60	2.312	79
2-5	25.5	61	12.084	55	2.238	63
6-64	26.8	23	12.725	22	2.278	23
Program Size						
Less than 101 Enrollees	21.2	305	8.916	288	1.905	305
101-250 Enrollees	22.8	358	10.465	341	2.231	358
251-500 Enrollees	23.5	167	11.628	157	2.257	167
Over 500 Enrollees	24.0	124	12.181	116	2.961	124
OVERALL AVERAGE	22.5	954	10.393	902	2.226	961

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Other includes local governments, colleges, private non-profit organizations.

TABLE III-6

PROGRAM OPERATION MEASURES BASED ON ACTUAL ENROLLMENT BY GEOGRAPHIC LOCATION

	Number of Children per Classroom		Child/Teacher Staff Ratio		Number of Classrooms per Center	
	Mean[1/]	No. of Valid Cases	Mean[1/]	No. of Valid Cases	Mean[1/]	No. of Valid Cases
Federal Region						
1	20.9	59	8.540	52	1.925	60
2	23.7	68	7.860	63	1.862	68
3	19.3	98	9.091	90	1.926	100
4	22.2	181	11.223	173	2.886	183
5	24.0	153	11.047	149	1.872	155
6	23.3	130	12.772	122	2.536	130
7	22.8	55	9.394	51	1.645	55
8	22.6	46	9.778	42	2.330	46
9	25.0	53	11.401	51	2.081	53
10	24.4	47	9.499	46	1.948	47
IMPD[2/]	20.2	64	8.944	63	2.450	64
SMSA[3/] Status						
SMSA	23.6	406	10.955	378	2.441	410
Non-SMSA	21.8	547	9.991	523	2.068	550
OVERALL AVERAGE	22.5	954	10.393	902	2.226	961

[1/] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratios.

[2/] IMPD: Indian and Migrant Program Division

[3/] SMSA: Standard Metropolitan Statistical Area

TABLE III-7

PROGRAM OPERATION MEASURES BASED ON PLANNED ENROLLMENT BY PROGRAM AUSPICE AND GEOGRAPHIC LOCATION

	Planned Enrollment Per Classroom		Planned Enrollment Per Center	
	Mean 1/	No. of Valid Cases	Mean 1/	No. of Valid Cases
Program Auspice				
Community Action Agency (CAA)	21.1	605	43.9	615
School	20.5	88	50.6	90
Other 2/	20.6	240	46.4	242
SMSA 3/ Status				
SMSA	21.9	409	51.8	416
Non-SMSA	20.2	547	41.3	555
Federal Region				
1	20.4	60	38.9	61
2	21.8	68	39.1	68
3	18.9	99	35.2	100
4	21.1	181	60.3	184
5	22.0	155	41.9	159
6	21.1	129	52.7	131
7	20.4	55	33.9	56
8	19.9	46	45.5	47
9	22.8	53	45.0	53
10	20.8	47	39.6	48
IMPD 4/	19.7	64	45.7	65
OVERALL AVERAGE	20.9	957	45.8	972

1/ Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

2/ Other includes local governments, colleges, private non-profit organizations.

3/ SMSA: Standard Metropolitan Statistical Area

4/ IMPD: Indian and Migrant Program Division

- Child/teaching staff ratios are relatively* low in Region I (8.5) and Region II (7.9), while high in Region VI (12.8).

- The number of planned children per center varies considerably more across program and geographic categories than classroom sizes.

Regression Analysis of Child/Staff Ratios

The previous analyses of this chapter have investigated individually the three key measures of program sizes or enrollment levels, child/staff ratios, and classroom sizes. This subsection attempts at a more sophisticated level to demonstrate how well variation in overall child/staff ratios across individual grantees relates to variation in classroom sizes and enrollment levels of these grantees.

Table III-8 presents regression estimates for two regression equations. In the first equation the ratio of children to total staff is specified as the dependent variable, whereas in the second equation the dependent variable is the ratio of children to ACYF-paid staff.

The salient findings can be stated simply as follows:

- Variation in average classroom size across grantees relates very similarly in a positive manner to variation in child/staff ratios. The strength of the relation between the two variables is very strong from a standpoint of statistical significance.

- The same result holds true for the relation between child/staff ratios and program size (enrollment level). That is, larger programs tend to have higher child/staff ratios (i.e., more children per staff member).

One would naturally expect that the larger the classroom sizes the greater the number of children per all staff members. A greater nember of enrollees in a grantee program also relates to higher child/staff ratios indicating economies of scale in the use of administrative and non-teacher support staff.

C. Supportive Services Provided by Head Start Programs

Head Start programs provide many supportive services or activities to participating children and families, in addition to educational instruction. These services include the areas of health, nutrition, social services, and parent involvement. Measures of Head Start activities are obtained in this study by computing ratios of the numbers of activities (e.g., number of meals provided per day) to the number of children served by a grantee.

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*Relative to the mean.

TABLE III-8

REGRESSION ESTIMATES FOR CHILD/STAFF RATIOS, BASED ON ACTUAL ENROLLMENT

	Ratio of Children to Total Staff	Ratio of Children to ACYF-Paid Staff
Classroom Size	.086 (10.7)*	.114 (9.3)*
Actual Enrollment (logarithmic value)	.526 (9.1)*	.491 (5.6)*
Constant	.56	.75
Adjusted R^2	.22	.14
Degrees of Freedom	794	794

*The t-statistics are in parentheses below each regression coefficient. A t-statistic of 2.33 or greater is statistically significant at the 1 percent level in a one-tail test; 1.65 at the 5 percent level. All of the above t-statistics are significant at the 1 percent level.

1. Study Objectives and Methodological Approaches

Study Objectives

Study questions relevant to this topic include:

- To what extent are Head Start programs providing supportive services, such as health, nutrition, and social services, to Head Start children and families?
- Are differences in supportive program activities related to differences in program types?

Methodological Approaches

The PIR data base provides information on supportive program activities in terms of:

- Number of children enrolled who receive or need health services (e.g., screenings, treatment).
- Average number of children fed per day.
- Number of families provided social services.
- Average number of parents who participate in different types of Head Start activities.

The number of program activities will vary considerably across grantees according to program size. For example, larger programs will typically provide a greater number of meals than smaller programs simply because they have more children to serve. In order to enhance the comparability of activities across grantees, the PIR data are standardized in terms of program size. That is, ratios are computed by dividing the number of activities by the grantee's enrollment level (actual number of children served by the Head Start program).

The statistical methodologies used in this section are similar to the approaches used in Sections A and B of this chapter. Descriptive statistics include means, medians, and standard deviations. Means or averages are tabulated further according to different program and geographic categories. A histogram is used to show the frequency distribution of grantees pertaining to the ratio of Head Start families receiving social services to enrollees served.

2. Definition of Variables and Data Qualifications

Definition of Variables

Several analytical variables encompass the topic of supportive program services or activities, including:

Health Services Variables

a. Percent of children served who have completed screening:

- Medical Screening (PIR Item 15A1 ÷ Item 16C3)
- Dental Screening (15B1 ÷ 16C3)
- Mental Health Screening (15C1 ÷ 16C3)

b. Percent of children served requiring treatment:

- Medical Treatment (15A1a ÷ 16C3)
- Dental Treatment (15B1a ÷ 16C3)
- Mental Health Treatment (15C1a ÷ 16C3)

c. Percent of children served who have received treatment:

- Medical Treatment (15A1b ÷ 16C3)
- Dental Treatment (15B1b ÷ 16C3)
- Mental Health Treatment (15C1b ÷ 16C3)

d. Percent of children who received medical treatment, dental treatment, or both:

= [No. of children receiving medical and/or dental treatment (15A1b + 16B1b)] ÷ [Actual enrollment (16C3)]

e. Percent of children served who have received reimbursed services:

- Medical Services (15A2 ÷ 16C3)
- Dental Services (15B2 ÷ 16C3)
- Mental Health Services (15C2 ÷ 16C3)

Social Service Variables

f. Ratio of families provided direct services to enrollees served (18A ÷ 16C3)

g. Ratio of families referred to enrollees served (18B ÷ 16C3)

h. Ratio of families referred and followed up by Head Start to enrollees served (18C ÷ 16C3)

Food Services Variable

i. Average no. of meals served by Head Start per day per child [(17A1 + 17A2 + 17A3) ÷ 16C3]

Parent Involvement Variables

j. Ratio of parents who are ACYF-paid staff to enrollees served (9C ÷ 16C3)

k. Ratio of parents who are volunteers to enrollees served (11A1a ÷ 16C3)

l. Ratio of parents attending policy meetings to enrollees served (19A ÷ 16C3)

m. Ratio of parents attending educational activities to enrollees served (19B ÷ 16C3)

Data Qualifications

Overall, the PIR data on supportive program services or activities are assessed as being fairly reliable. The PIR data on health services information, though, appeared somewhat more problematical than other items in the PIR.

In particular, the PIR questionnaire contains multiple sets of items on health services that can be compared against each other for data consistency and analytical purposes. The multiple items for medical, dental, and mental services are the number of children enrolled who:

- Completed screening.
- Needed treatment.
- Received treatment.
- Received services which were reimbursed by Medicaid.

Typically, one would expect the following patterns to be observed:

- The number of children receiving treatment does not exceed the number needing treatment or having completed the respective screening.
- The number of children needing treatment does not exceed the number of screenings.
- The number of children who received services reimbursed by Medicaid does not exceed the respective numbers for any of the other subitems.

However, there were numerous instances where the PIR data contradicted these patterns. For example, the number of children receiving treatment exceeded the number needing treatment. More specifically, in comparing the number of children who receive medical treatment to the number who "need" it, about eight (8) percent of the grantees in the PIR data file reported a greater number receiving treatment than needing it. Over 50 percent reported equal numbers for receiving and needing treatment. Also, the overall average proportion of "needy" children who receive treatment exceeds one. In light of these questionable results, findings on the percent of "needy" children who receive treatment are not formally presented in this study.

Our editing of the PIR data removed several of the gross inconsistencies; however, many cases also appeared to have "grey" areas where it was better to leave the data unaltered from an editing standpoint. For instance, the number of children receiving treatment may exceed the number needing treatment for legitimate reasons, depending on the respondent's own interpretation of "need." More explicit definitions and instructions and more carefully designed questions would have served this section of the PIR questionnaire well.

3. Findings and Conclusions on Head Start Support Services

Tables III-9 to III-11 present descriptive and tabular statistics on Head Start program services and activities.* Figure III-9 shows the frequency distribution of grantees by categories for the ratio of Head Start families receiving social services to enrollees served. Findings and conclusions are listed here by topical area.

Health Services

a. The average grantee provides medical screening for about 90 percent of its enrollees served and dental screening for 85 percent of its enrollees. The average for mental screenings is 24 percent.

b. A larger proportion of children require dental treatment (44 percent) than medical treatment (24 percent).

---

*In calculating the statistics presented in these tables, only those cases in which the numerator did not exceed the denominator were included. E.g., whenever the number of children served (per PIR Item 16C3) was less than the number of children who received medical treatment, this case was not considered a valid case. Note also that the health service variables in Table III-9 are presented singularly. No attempt has been made to look at the percent of children receiving services to those needing services because of the previously mentioned data problems.

TABLE III-9

DESCRIPTIVE STATISTICS[1] ON PROGRAM ACTIVITIES

Variable	No. of Valid Cases	Percent Missing of 979 Grantees	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
HEALTH SERVICES[2]							
Percent of children served who have completed screening:							
- Medical Screening	875	10.6%	89.5%	93.9%	13.3%	5.6%	100%
- Dental Screening	895	8.6	84.7%	90.0%	17.8%	0.0%	100%
- Mental Health Screening	910	7.0	24.2%	8.2%	33.2%	0.0%	100%
Percent of children served needing treatment:							
- Medical Treatment	927	5.3	23.8%	18.2%	21.1%	0.0%	100%
- Dental Treatment	930	5.0	43.7%	40.5%	24.8%	0.0%	100%
- Mental Health Treatment	920	6.0	5.9%	3.6%	7.2%	0.0%	97.3%
Percent of children served who have received treatment:							
- Medical Treatment	924	5.6	26.2%	19.3%	23.8%	0.0%	100%
- Dental Treatment	934	4.6	42.2%	38.3%	25.6%	0.0%	100%
- Mental Health Treatment	919	6.1	5.5%	3.4%	7.6%	0.0%	97.3%
Percent of children served who have received reimbursed services:							
- Medical Services	911	6.9	27.2%	21.1%	24.8%	0.0%	100%
- Dental Services	904	7.7	22.6%	18.0%	21.6%	0.0%	98.3%
- Mental Health Services	874	10.7	1.5%	0%	4.7%	0.0%	85.7%
SOCIAL SERVICES							
- Ratio of families provided direct services to enrollees served	951	2.9	0.685	0.814	0.475	0.14	5.82
- Ratio of families referred to enrollees served	927	5.3	0.300	0.249	0.231	0.0	1.0
- Ratio of families referred and followed up by H.S. to enrollees served	925	5.5	0.249	0.187	0.215	0.0	1.0
FOOD SERVICES							
Average No. of meals served per day per child served by Head Start	946	3.4	1.17	1.18	0.457	0.0	2.78
PARENT INVOLVEMENT							
Ratio of parents who are ACYF-paid staff to enrollees served	931	4.9	0.056	0.050	0.037	0.0	0.24
Ratio of parents who are volunteers to enrollees served	821	16.1	0.674	0.625	0.385	0.0	2.00
Ratio of parents attending policy meetings to enrollees served	923	5.7	0.142	0.091	0.150	0.0	1.00
Ratio of parents attending educational activities to enrollees served	910	7.0	0.253	0.208	0.203	0.0	0.961

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent. These variables are calculated using the number of Head Start children served as the base (per PIR Item 16C).

[2] As pointed out in the text, the data on health services may have problems in inconsistency. Data pertaining to number of children needing treatment, in particular, may be questionable and poorly related to numbers of children who are screened or have received treatment. Comparisons among "screening," "need," and "treatment" items, therefore, should be made only with great caution.

TABLE III-10

PROGRAM ACTIVITIES MEASURES BASED ON ACTUAL ENROLLMENT BY PROGRAM CHARACTERISTICS

	Percent of Children Who Received Medical, Dental Treatment or Both		Average Number of Meals Served Per Day Per Child Served by Head Start		Ratio of Families Provided Direct Services to Enrollees Served	
	Mean[1]	No. of Valid Cases	Mean[1]	No. of Valid Cases	Mean[1]	No. of Valid Cases
Program Auspices						
Community Action Agency (CAA)	68.4%	575	1.15	583	.718	601
School	66.0	85	1.21	88	.673	89
Other[2]	68.9	227	1.08	231	.606	236
Agency Organization						
Grantee Only	69.1	752	1.14	767	.670	785
Grantee with Delegates	64.7	159	1.16	159	.751	166
Number of Delegate Agencies Administered by Grantee						
0	69.1	756	1.16	786	.671	789
1	67.8	77	1.23	77	.788	79
2-5	59.8	55	1.20	60	.756	60
6-64	66.3	23	1.07	23	.592	23
Program Size						
Less than 101 Enrollees	74.6	296	1.15	306	.669	304
101-250 Enrollees	66.5	339	1.13	353	.689	356
251-500 Enrollees	65.1	159	1.23	164	.700	171
Over 500 Enrollees	62.2	117	1.24	123	.690	120
OVERALL AVERAGE	68.3%	911	1.17	946	.685	951

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] Other includes local governments, colleges, private non-profit organizations.

TABLE III-11

PROGRAM ACTIVITIES MEASURES BASED ON ACTUAL ENROLLMENT BY GEOGRAPHIC LOCATION

	Percent of Children Who Received Medical, Dental Treatment or Both		Average Number of Meals Served Per Day Per Child Served by Head Start		Ratio of Families Provided Direct Services to Enrollees Served	
	Mean[1]	No. of Valid Cases	Mean[1]	No. of Valid Cases	Mean[1]	No. of Valid Cases
Federal Region						
1	71.2%	55	1.220	57	.819	58
2	56.2	68	1.127	68	.821	69
3	74.8	93	1.128	95	.713	98
4	74.6	176	1.438	176	.654	182
5	61.6	144	0.945	149	.614	153
6	59.7	125	1.193	120	.712	130
7	63.8	52	1.095	54	.788	54
8	73.3	43	0.925	47	.668	47
9	66.9	49	0.970	51	.687	52
10	76.6	46	0.972	47	.715	47
IMPD[2]	80.1	60	1.152	62	.466	62
SMSA[3] Status						
SMSA	71.6	529	1.135	394	.689	409
Non-SMSA	63.8	381	1.151	531	.682	541
OVERALL AVERAGE	68.3%	911	1.17	946	.685	951

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] IMPD: Indian and Migrant Program Division

[3] SMSA: Standard Metropolitan Statistical Area

FIGURE III-9

FREQUENCY DISTRIBUTION OF GRANTEES BY RATIO OF FAMILIES PROVIDED WITH DIRECT SOCIAL SERVICES TO NUMBER OF ENROLLEES SERVED

```
I
*********************************** (n1/=324)    33.1 %
I   0 To .49
I
I
*************************** (n = 246)          25.1 %
I   .50 To .89
I
I
************************************ (n = 328) 33.5 %
I   .90 To 1.00
I
I
****** (n = 53)2/                               5.4 %
I   Over 1.00
I
I
**** (n = 28)                                   2.9 %
I   Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500
                                Frequency of Grantees
```

---

[1] The "n" denotes the number of valid cases for a given ratio size.

[2] Presumably in cases where the ratio exceeds one, the grantee also provided social services to families other than those who have children participating in the program. Of the 53 cases whose ratio exceeds 1.0, 11 cases fall in the range of 1.0 to 1.5, 34 between 1.5 and 2.0, and 8 between 2.0 and 6.0.

c. The average percent of children who received medical or dental treatment or both is 68 percent overall. This measure appears to vary more across federal regions than across program types or characteristics.

d. A higher percent of children in smaller programs, though, appear to receive medical or dental treatment than children in larger programs.

Social Services

d. The average ratio of families provided social services directly by Head Start to enrollees served is .69, while the respective ratio for families referred to other agencies is .30.

e. The ratios of families provided social services by Head Start to enrollees served follow a fairly even distribution over the interval from 0 to 1 (see Figure III-9). In other words, this ratio measure tends to vary more widely across grantees than most other ratio or percent measures.

Food Services

f. The overall average number of meals served per day per child, including breakfast, lunch, and dinner, is 1.17.

g. Schools serve more meals per day per child (1.21) than other program auspices. Larger programs tend to serve more meals per child than smaller programs.

h. Region IV serves the largest number of meals per day per child (1.44).

Parent Involvement

i. The ratio of volunteer parents to enrollees served is .67. In other words, for every three reported enrolles in Head Start two parents serve as Head Start volunteers.

j. The ratios of parents who attend policy meetings and educational activities to enrollees served are .14 and .25, respectively.

CHAPTER IV

DESCRIPTIVE ANALYSIS OF COST PER CHILD MEASURES

The analysis of Head Start program costs is of central importance in meeting several of the study's objectives. These objectives pertain to determining which program characteristics relate to program costs, what meaningful comparisons and contrasts among types or clusters of programs can be made, and what are the statistical ranges in cost variations.

Chapters IV and V provide an indepth examination of key cost measures, with Chapter IV providing more of a descriptive approach, rather than a causal analysis approach. Chapter V attempts to assess the factors which impact on cost per child differences across grantees. The major sections of this chapter are organized as follows:

- Study Objectives and Methodological Approaches
- Definition of Variables and Data Qualifications
- Findings and Conclusions

Within the Findings and Conclusions section, the following topical areas are addressed:

- Descriptive Summary Statistics
- Cost Per Child Differences Across Program and Geographic Categories
- Cost Comparisons Between Part-Day and Full-Day Operations
- Cost Per Child at the Survey Respondent Level
- Handicapped Funding and Food Cost Per Child

A. Study Objectives and Methodological Approaches

1. Study Objectives

There are two basic sets of study objectives on costs of relevance to this chapter. The first set pertains simply to what are the program costs per child (i.e., definition and measurement). The second set of objectives addresses what are the cost differences as they relate to program characteristics or clusters.

What Are Program Costs Per Child?

The first set of study questions include:

- What are the total Head Start program costs per child per grantee for the 1976/1977 operating year? What are ACYF's costs per child based upon the grantee as the unit of analysis?
- What are the program costs (per child, statistical average, range of cost variation) for full-day programs and part-day programs, for each part-day model option?
- What is the per child hourly cost for serving a child in full-day and part-day programs?
- What is the unit per child cost, percentage of total program cost, percentage of ACYF dollar cost associated with particular program activities, including: health services, education services, parent involvement activities, social services, administration, and transportation?
- What are Head Start salary costs for teachers, administrators, and other staff members by functional category?

Several of the topics or issues raised by the above study questions could not be examined fully or at all within the framework of this study. The availability of appropriate data and the suspect quality of the PIR survey data in certain instances were constraining factors.

In particular, unit per child cost associated with particular program activities and with functional staff categories could not be analyzed in this study because the PIR does not capture cost data for these activities or functional categories. Information on these aspects of Head Start program operation would be useful from a program management perspective. Key cost comparisons, for instance, could have been made among average cost per teacher and aides, overall personnel costs, child/staff ratios, and overall total costs per child. The provision of additional services in one program relative to another, such as transportation, are likely to affect cost differences across grantees.

Determination of costs per child on an hourly basis is a study objective in order to facilitate cost comparisons between part-day and full-day programs. However, costs per child per hour based on the PIR are not presented here because the PIR data on hours of operation within a day are unreliable (as discussed in Chapter III under Section A).

Cost comparisons between part-day and full-day programs at the grantee level of analysis are further hampered in that many grantees will have both full-day and part-day Head Start operations, either within their own programs or within their respective delegate agencies. Analysis of part-day and full-day operations at the grantee, rather than respondent, level requires the segregation of part-day and full-day PIR data within individual grantees, thereby eliminating the individual grantee as the unit of analysis. Thus, the most reliable unit of analysis for full- and part-day programs is the individual program data in the respondent PIR forms, where individual respondents can be separately and wholly identified as being either part-day programs, full-day programs, or both.

What are the Cost Differences in Relation to Program Type?

Study questions relevant to cost differences include:

- What are the important cost-related program characteristics by which Head Start programs can be typed or clustered for purposes of making meaningful comparisons and contrasts? For example, program dimensions which may make a difference to cost include: size of program/number of children served, average daily attendance, geographic location, program auspices/settings and specific populations served.
- How do program costs vary in relation to program type? From the perspective of costs, how do Head Start program types or clusters compare with one another?

2. Methodology

The overall methodology for the cost analysis in Chapter IV is similar to the approaches employed in the previous chapters. Descriptive summary statistics such as means, medians, and standard deviations are presented for various cost measures. Average values or means are tabulated according to program types or clusters. The frequency distributions of Head Start grantees according to several categories covering ranges for high, medium, and low costs are examined with the aid of histograms.

Alternative cost measures examined in this study include:

- Total costs per child served (based on actual enrollment);
- Total costs per planned enrollee;
- ACYF costs per child served;
- ACYF costs per planned enrollee;
- Handicapped funds per handicapped child; and
- Food costs per child served.

Cost measures based on both actual and planned enrollment are presented for comparative purposes. ACYF costs are distinguished from total costs in order to facilitate comparisons from an ACYF management perspective.

The unit of analysis is the grantee, except that some additional results based on the survey respondents (both individual grantee and delegate agency programs) are presented as well. Analysis of cost per child measures of delegate agencies and individual grantee programs has comparative value that enriches the overall cost analysis. The survey respondent as the unit of analysis also gives recognition to the diversity of Head Start programs within grantee organizations. For example, program auspices will vary across delegate agencies within grantee organizations. Part-day "model options" which vary across respondents within and across grantees include:

- Standard Head Start model;
- Variations in center attendance;
- Double session;
- Home-based models; and
- Locally designed options.

Part-day and full-day program operations also will be variously implemented by different respondents within grantee organizations.

B. Definition of Variables and Data Qualifications

1. Definition of Variables

The following list of equations states the computational procedures for defining the cost measures presented in Chapter IV. Reference to the PIR line items is made within the parentheses. (For a more exhaustive list of variables the reader is referred to Appendix F.)

a. Total cost

= [ACYF funding (PIR Item 12B) + Handicapped Funding (13A2) + Non-Federal Share (13A3) + USDA reimbursement for food costs (13B) + Other costs (13C1, 13C2, 13C3, and 13C4)]

b. Total cost per child served

= [Total cost] ÷ [Total no. of children served (16C3)]

c. Total cost per planned enrollee

= [Total cost] ÷ [Total planned enrollment (16A3)]

d. ACYF cost per child served
   = [ACYF funding (12B)] ÷ [Total no. of children served (16C3)]

e. ACYF cost per planned enrollee
   = [ACYF funding (12B)] ÷ [Total planned enrollment (16A3)]

f. Handicapped funds per handicapped child served
   = [Handicapped funds (13A2)] ÷
     [No. of handicapped children served (16B1a and 16B2a)]

g. USDA reimbursed food costs per child served*
   = [USDA reimbursed food costs (13B)] ÷
     [Total no. of children served (16C3)]

h. Total food costs per child served*
   = [Total food costs (17B1 and 17B2)] ÷
     [Total no. of children served (16C3)]

i. Non-federal share per child served
   = [Non-federal share costs (13A3)] ÷
     [Total no. of children served (16C3)]

j. Other costs per child served
   = [Other costs (13C1, 13C2, 13C3, 13C4)] ÷
     [Total no. of children served (16C3)]

2. Data Qualifications

The unavailability of data in the PIR to cover certain cost study objectives (i.e., costs by program activity and functional category) was discussed earlier in this chapter. Also, cost measures on an hourly basis are not presented here because of the very poor quality of the PIR data on Head Start operating hours per day. In the case of hours of operation, the erroneous inclusion of "day care" hours by many respondents and numerous instances of responses falling outside very broad limits of acceptability precludes the use of these data in the study.

The cost data available from the PIR for analysis are rated overall as fairly reliable. The cost data, though, appear to be reliable in only an approximate sense, rather than a precise one. Averages or means calculated with the cost data for several cases of grantees should have good reliability, but means or cost comparisons based on only a few cases will have less reliability. This is because in a large number of cases, random errors will tend to offset each other, whereas in a few cases, one or two extreme errors can seriously bias a mean or other statistical result.

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*Food costs per child served does not imply food costs per only children receiving food but per actual total enrollment. It is possible that some children in the program receive meals while others do not.

Problems in the reliability of the cost data stem from lack of instruction in the PIR for respondents, lack of cost item definitions, and inadequate quality control on the initial collection of the PIR data. Also, cost items pertain to "costs incurred against revenue" by source of revenue (e.g., ACYF funding, USDA reimbursement, etc.), rather than according to cost accounting entities such as staff salaries, administrative overhead, equipment costs, utilities, etc. Survey respondents were likely to report estimates of their costs, based on their own definitions of what constituted "costs incurred against revenues" by revenue source. Also, in many instances respondents are likely to report simply the amount of the revenue source rather than the costs incurred against it. In fact, figures reported as revenue may be more reliable than costs incurred against the revenue. This is because "revenue" figures are the actual amounts of monies received, while "costs incurred revenue" are only estimates.*

One potential source of error in particular should be noted here. (For a more extensive discussion of errors in the cost data, the reader is referred to Appendix C.) "Central Office" grantees and "Grantees With Delegates," as opposed to grantee programs without delegates, may report in their own PIR survey form funding which was allocated to their delegates for their own operations. Hence, there may have been some double counting of funds for these particular respondents. In extreme cases, the data was corrected or excluded, but in other cases where it was more difficult to ascertain accuracy, it was accepted as valid.

A qualification should also be made with regard to analyzing part-day vs full-day programs from the aggregate data file. Many grantees will have both full-day and part-day Head Start operations, either within their own programs or with their respective delegate agencies.

The unit of analysis in this case is not the grantee as it is for the other analyses; instead, the unit of analysis is either the part-day or full-day operation within the grantee. Hence, grantees with both part-day and full-day operations, either within their own programs or with their respective delegate agencies, will have associated with them two cases or units of analysis, rather than only one. The total number of possible observations in this regard is 1,120, compared to 979 grantees in the PIR data file.

---

*Hence, Item 12B (ACYF funding), rather than Item 13A1 (costs incurred against ACYF funding) is used in the total cost per child measure in this study.

C. Findings and Conclusions

1. Descriptive Summary Statistics

Table IV-1 presents descriptive statistics on several cost per child measures. Figures IV-1 through IV-4 display histograms on total costs per child, children served, total costs per planned enrollment, ACYF funding per child, (exclusive of handicapped costs), and ACYF funding per planned enrollment, respectively. Each of the categories on the total cost measures covers a range of $400, while the range for the ACYF cost categories is $300. Findings which can be highlighted here include:

- The overall average value on total cost per child based on actual enrollment, is $1,900 for the 1976/1977 operating period, with a minimum value of $583 per child for one grantee and a maximum value of $6,324 for another grantee.

- Half of the grantees have total costs per child which are less than $1,783, while the costs per child for the other half is greater than $1,783.

- The total cost per planned enrollee (where total costs are divided by planned, rather than actual enrollment) has a mean value of $2,050. The higher figure of $2,050 relative to the $1,900 reflects that actual enrollment exceeded planned enrollment on average. The mean values for other cost measures include $1,446 on ACYF cost per child (inclusive of handicapped costs), $100 on USDA reimbursed food costs per child, and $356 on the non-federal share.

- More than half of the grantees for which we have valid cases on total costs per child served* fall within the range from $1,500 to $2,300 (i.e., 54 percent); 32.1 percent are between $1,500 and the mean of $1,900, while a lower 22.2 percent of the cases are between the mean and $2,300. Hence, the distribution of cases is not evenly balanced around the mean with relatively more cases being less than the mean. These results are similarly reflected in the other histograms for the other cost measures (i.e., total costs per planned enrollee and ACYF funding per child).

The individual characteristics of very high cost grantees may be of interest to some readers. Table IV-2 presents a list of grantees whose total costs per child served exceeds $3,500. Generally speaking, the table reflects a wide diversity of programs with very high costs per child.

---

* "Per child served" implies here and elsewhere that the respective measure is based on actual, rather than planned enrollment.

TABLE IV-1

DESCRIPTIVE STATISTICS[1] ON TYPES OF COST MEASURED AS A PER CHILD RATIO

Types of Cost	No. of Valid Cases	Percent Missing of 979 Grantees	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
Total Cost Per Child Served	826	15.6%	$1,900	$1,783	$637	$583	$6,324
Total Cost Per Planned Enrollee	829	15.3	2,050	1,933	664	570	6,324
ACYF Cost Per Child Served	934	4.6	1,279	2,204	430	237	4,426
ACYF (Incl. Handicapped) Funds Per Child Served	857	12.5	1,344	1,269	441	241	4,451
ACYF (Incl. Handicapped) Funds Per Planned Enrollee	860	12.2	1,446	1,377	456	215	4,388
Handicapped Funds Per Child Served	868	11.3	64	49	60	0	449
Handicapped Funds Per Handicapped Child Served	829	15.3	487	361	496	9	4,232

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

TABLE IV-1 (continued)

Types of Cost	No. of Valid Cases	Percent Missing of 979 Grantees	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
Non-federal Share Per Child Served	923	5.7%	$356	$320	$197	$ 0	$1,789
USDA Reimbursed Food Costs Per Child Served	912	6.8	100	93	70	0	697
Total Food Cost Per Child Served	908	7.3	102	92	67	0	589
Other Costs Per Child Served	938	4.2	105	30	210	0	2,697

FIGURE IV-1

FREQUENCY DISTRIBUTION OF GRANTEES BY TOTAL COSTS PER CHILD SERVED

```
I
*** (n1/= 21)                                         2.5%
I  Less than $1,000
I
I
******************** (n = 194)                       23.5%
I  $1,000 to 1,499
I
I
**************************** (n = 265)               32.1%
I  $1,500 to 1,899
I
I
******************* (n = 185)                        22.2%
I  $1,900 to 2,299
I
I
*********** (n = 96)                                 11.6%
I  $2,300 to 2,699
I
I
**** (n = 26)                                         3.1%
I  $2,700 to 3,099
I
I
*** (n = 17)                                         2.1%
I  $3,100 to 3,499
I
I
*** (n = 24)                                         2.9%
I  $3,500 or over
I
I
**************** (n = 153)
I  Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500
                               Frequency of Grantees
```

---

[1] The "n" denotes the number of valid cases for a given cost category.

FIGURE IV-2

FREQUENCY DISTRIBUTION OF GRANTEES BY TOTAL COSTS PER PLANNED ENROLLEE

```
I
*** (n1/= 16)                                 1.9%
I  Less than $1,000
I
I
************* (n = 119)                      14.4%
I  $1,000 to 1,499
I
I
*************************** (n = 259)        31.2%
I  $1,500 to 1,899
I
I
*********************** (n = 220)            26.5%
I  $1,900 to 2,299
I
I
************* (n = 120)                      14.5%
I  $2,300 to 2,699
I
I
***** (n - 38)                                4.6%
I  $2,700 to 3,099
I
I
**** (n = 27)                                 3.3%
I  $3,100 to 3,499
I
I
**** (n - 30)                                 3.6%
I  $3,500 or over
I
I
**************** (n = 150)
I  Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500
                              Frequency of Grantees
```

1/ The "n" denotes the number of valid cases for a given cost category.

FIGURE IV-3

FREQUENCY DISTRIBUTION OF GRANTEES BY ACYF FUNDING PER CHILD SERVED

```
I
**** (n[1]= 30)                                3.2%
I  Less than $700
I
I
******************* (n = 184)                 19.7%
I  $700 to 999
I
I
*************************************(n=357)- 38.2%
I  $1,000 to 1,299
I
I
********************** (n = 213)              22.8%
I  $1,300 to 1,599
I
I
********** (n = 85)                            9.1%
I  $1,600 to 1,899
I
I
******** (n = 65)                              7.0%
I  $1,900 or over
I
I
****** (n = 45)
I  Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500
                              Frequency of Grantees
```

---

[1] The "n" denotes the number of valid cases for a given cost category.

FIGURE IV-4

FREQUENCY DISTRIBUTION OF GRANTEES BY ACYF FUNDING PER PLANNED ENROLLEE

```
I
**** (n1/= 27)                                2.9%
I  Less than $700
I
*********** (n = 102)                        10.9%
I  $700 to 999
I
I
********************************** (n = 332) 35.4%
I  $1,000 to 1,299
I
I
***************************** (n = 276)      29.5%
I  $1,300 to 1,599
I
I
************* (n = 115)                      12.3%
I  $1,600 to 1,899
I
I
********** (n = 85)                           9.1%
I  $1,900 or over
I
I
***** (n = 42)
I  Missing
I
I.........I.........I.........I.........I.........I
0        100       200       300       400       500
                              Frequency of Grantees
```

[1/] The "n" denotes the number of valid cases for a given cost category.

TABLE IV-2

COST PER CHILD OF HIGH COST GRANTEES

Cost Per Child	State	Agency Organization	No. of Delegate Agencies Administered by Grantees	Program Auspice
$3,514	Georgia	Grantee with Delegates	1	CAA
3,530	New York	Grantee Only	0	CAA
3,575	New York	Central Office Grantee	2	CAA
3,685	Kansas	Central Office Grantee	2	CAA
3,703	New York	Grantee Only	0	Other[1]
3,732	D.C.	Grantee with Delegates	4	CAA
3,746	Alaska	Grantee Only	0	CAA
3,788	California	Grantee Only	0	Other
3,862	D.C.	Central Office Grantee	1	CAA
3,863	New Jersey	Grantee with Delegates	1	CAA
3,868	New York	Central Office Grantee	10	CAA
3,875	Alaska	Grantee Only	0	Other
3,886	New York	Grantee Only	0	CAA
3,910	Washington	Grantee Only	0	Other
3,962	New York	Grantee Only	0	Other
4,006	Maryland	Central Office Grantee	1	Other
4,216	Iowa	Grantee with Delegates	2	CAA
4,442	New Jersey	Grantee Only	0	Other
4,487	N. Carolina	Central Office Grantee	1	CAA
4,671	Washington	Grantee Only	0	Other
4,676	Maryland	Grantee Only	0	CAA
4,706	California	Grantee Only	0	(Missing)
5,416	Pennsylvania	Central Office Grantee	4	CAA
6,324	California	Grantee Only	0	School

---

[1] Other includes local governments, colleges, private non-profit organizations.

2. Cost Per Child Differences Across Program and Geographic Categories

Significant cost variations across Head Start grantees can be found according to various program characteristics such as program auspice, agency organization, and the number of delegates which a grantee has. Important cost differences also exist by geographic location, including regional location and SMSA (Standard Metropolitan Statistical Area) status.

Table IV-3 presents three measures of costs per child by various program descriptors. These measures are total costs per child served, total costs per planned enrollment, and ACYF funding per child served (exclusive of handicapped costs). The first two columns in Table IV-3 give the mean values on total costs per child by program category and the respective number of valid cases.

Program Auspice

The first program characteristic listed in Table IV-3 is program auspice, consisting of the three categories of CAA (Community Action Agency), school, and other. "Other" consists of local government organizations, colleges, private non-profit organizations, or any other organizations which do not fall under the categories of CAA or school. Findings pertaining to the program auspice characteristics are:

- The lowest cost by program auspice is school with a mean value of $1,848 on total costs per child served, followed closely by CAA with a mean value of $1,874 (refer to Table IV-3).
- The "other" auspice category has a higher cost per child by the amount of $124 (= $1,972 - $1,848) compared to $26 (=$1,874 - $1,848) between CAA and school (refer to Table IV-3).
- The cost differences are similar for the cost per planned enrollment measure and ACYF funding per child, except that the cost difference between CAA and school is greater per ACYF funding (refer to Table IV-3) which shows a higher ACYF cost per child for CAA's.

Agency Organization

The program characteristic of agency organization consists of three categories, labeled in Table IV-3 as "Grantee Only," "Central Office," and "Grantee With Delegates." "Grantee Only" operates its own Head Start program but has no delegate agencies which it administers. "Central Office" is a grantee which has central office staff to administer delegate agencies but has no Head Start program of its own. "Grantee With Delegates" has its own Head Start program and administers delegate agencies as well. The results in Table IV-3 indicate that average cost measures for grantees without delegates are less than they are for grantees with delegates.

TABLE IV-3

AVERAGE VALUES[1] OF COST PER CHILD MEASURES BY PROGRAM CHARACTERISTICS

Program Characteristic	Total Cost Per Child Served	No. of Valid Cases	Total Cost Per Planned Enrollee	No. of Valid Cases	ACYF Funding Per Child Served	No. of Valid Cases
Program Auspice						
Community Action Agency (CAA)	$1,874	522	$2,022	524	$1,270	591
School	1,848	70	1,994	70	1,152	85
Other[2]	1,972	215	2,122	216	1,342	234
Agency Organization						
Grantee Only	1,867	703	2,013	706	1,262	791
Central Office	2,123	59	2,346	59	1,414	67
Grantee with Delegates	2,063	64	2,178	64	1,334	76
No. of Delegate Agencies Administered by Grantee						
0	1,871	707	2,017	710	1,263	795
1	2,040	48	2,212	48	1,411	61
2-5	2,127	52	2,303	52	1,362	56
6-64	2,017	19	2,184	19	1,254	22
Program Size						
Less than 101 Enrollees[3]	2,022	266	2,153	266	1,361	297
101-250 Enrollees	1,853	311	2,022	311	1,251	355
251-500 Enrollees	1,776	146	1,948	145	1,181	163
Over 500 Enrollees	1,905	103	2,027	103	1,289	119
OVERALL AVERAGE	1,900	826	2,050	829	1,279	934

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Other includes local governments, colleges, private non-profit organizations.

[3] Enrollees *served* by Head Start, as opposed to *planned* enrollment.

One implication of this cost difference is that "Central Office" grantees and "Grantees With Delegates" expend more resources than "Grantees Only" in order to administer delegate agencies. A complication in these cost differences, though, may be attributed to a PIR reporting anomaly, as discussed previously. That is, some "Central Office" and "Grantee With Delegates" survey respondents may report in their own PIR survey form funding which was administered to their delegates for their own use. Hence, there may have been some double counting of funds for these particular respondents.

Number of Delegate Agencies

Another program descriptor identified in Table IV-3 is the number of delegate agencies which a grantee organization administers. It can be noted that the vast majority of valid cases for this program characteristic fall into the category of zero delegates (707 valid cases for the total cost per child measure), in contrast to the other categories (119 valid cases). Table IV-3 reveals:

- Grantees with no delegates have the lowest cost per child measures; and
- Grantees with two to five delegates have the highest for total cost per child measure.

Program Size

Table IV-3 also presents costs per child measures according to four categories for program size. These program size categories are: less than 101 enrollees; 101 to 250 enrollees; 251 to 500 enrollees; and over 500 enrollees. The results indicate that:

- Without consideration for other factors impacting upon costs, the optimal size for a grantee from a cost perspective appears to fall within the category of 251 to 500 enrollees where the average total cost per child served is a relatively low $1,776.

- Economies of scale appear to be achieved with increasing program size from less than 100 enrollees up to 500 enrollees, whereby costs per child decline across the first three size categories for all three cost measures in Table IV-3. For the size category of 500 enrollees, though, average costs per child increase by a sizeable margin.

Program Auspice and Agency Organization Combined

Table IV-4 contains cost per child measures for program auspice and agency organization categories combined, for the two cost measures of total costs per child served, and ACYF funding per child served. Findings include:

TABLE IV-4

AVERAGE VALUES[1] OF COST PER CHILD MEASURES BY PROGRAM AUSPICE AND AGENCY ORGANIZATION

Agency Organization	TOTAL COST PER CHILD SERVED[3]					
	Community Action Agency (CAA)		School		Other[2]	
	Cost Ratio	No. of Valid Cases	Cost Ratio	No. of Valid Cases	Cost Ratio	No. of Valid Cases
Grantee Program Only	$1,822	431	$1,821	67	$1,973	189
Grantee Program with Delegates	2,013	54	2,803	2	1,858	8
Central Office Grantee	2,281	37	1,742	1	2,208	18
Combined Average	1,874	522	1,848	70	1,972	215

Agency Organization	ACYF COST PER CHILD SERVED[3]					
	Community Action Agency (CAA)		School		Other	
	Cost Ratio	No. of Valid Cases	Cost Ratio	No. of Valid Cases	Cost Ratio	No. of Valid Cases
Grantee Program Only	$1,240	484	$1,147	81	$1,346	207
Grantee Program with Delegates	1,326	63	1,271	2	1,479	9
Central Office Grantee	1,521	44	1,204	2	1,220	18
Combined Average	1,270	591	1,152	85	1,342	234

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Other includes local governments, colleges, private non-profit organizations.

[3] Based on actual enrollment.

- For "grantee programs only" on total costs per child served, the cost difference between CAA grantees and school grantees is virtually nil ($1,822 vs $1,821), whereas the "other" program auspice category has a considerably higher $1,973 cost per child. Very few valid cases of school grantees fall into either the category of "Grantee Program with Delegates" (n = 2 for total costs per child) or "Central Office Grantee" (n = 1), so that further comparisons between school and other program auspices are rather limited.

- Within the category of CAA's, we can note a much higher total cost per child of $2,281 for "Central Office Grantees" and $2,013 for "Grantee Programs with Delegates."

- These patterns of cost differences are similar for the cost measure of ACYF funding per child served as well, except that the cost difference between CAA and school is greater. For example, ACYF funding per child served is $1,240 for CAA's, compared to $1,147 for schools, for "Grantee Program Only."

Geographic Location

Table IV-5 presents cost per child measures according to geographic location. Findings include:

- Sizeable cost differences are evident across the ten federal regions plus IMPD (Indian and Migrant Program Division). The range varies from a low $1,482 in Region VI to a high of $2,651 in Region II (New York, New Jersey, and Puerto Rico).

- Large cost differences are also evident for SMSA* status, where the total costs per child are $167 higher in SMSA's than in non-SMSA's, or for city status, where the total costs per child are $189 higher in central city SMSA's than in non-SMSA's.

A large portion of these cost differences can be attributed to geographic differences in average teacher salaries and cost-of-living. (This factor is treated in more detail later in Chapter V.)

Table IV-6 presents the three cost per child measures by federal region for SMSA and non-SMSA areas separately. The summary finding from this table is:

- With only a few exceptions, costs per child are lower in each of the regions in non-SMSA relative to SMSA areas.

---

*SMSA: Standard Metropolitan Statistical Area.

TABLE IV-5

AVERAGE VALUES[1] OF COST PER CHILD MEASURES BY GEOGRAPHIC LOCATION

Geographic Location	Total Cost Per Child Served	No. of Valid Cases	Total Cost Per Planned Enrollee	No. of Valid Cases	ACYF Funding Per Child Served	No. of Valid Cases
Federal Region						
1	$2,079	48	$2,125	49	$1,415	57
2	2,651	58	2,881	58	1,794	64
3	2,234	83	2,357	84	1,498	94
4	1,825	166	1,920	167	1,213	180
5	1,634	128	1,783	129	1,097	145
6	1,482	104	1,616	103	989	128
7	1,775	49	2,016	49	1,221	55
8	1,721	45	1,930	45	1,196	46
9	2,099	47	2,289	47	1,436	53
10	2,064	44	2,401	44	1,349	47
IMPD[2]	2,046	54	2,114	54	1,420	65
SMSA[3] Status						
SMSA	1,999	329	2,165	311	1,331	389
Non-SMSA	1,832	496	1,970	497	1,241	544
City Status						
Central City SMSA	2,021	229	2,202	230	1,341	269
Other SMSA	1,948	100	2,081	101	1,307	120
Non-SMSA	1,832	496	1,970	497	1,241	544
OVERALL AVERAGE	1,900	826	2,050	829	1,279	934

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] IMPD: Indian and Migrant Program Division

[3] SMSA: Standard Metropolitan Statistical Area

TABLE IV-6

AVERAGE VALUES[1] OF COST PER CHILD MEASURES BY REGION AND SMSA STATUS COMBINED

	SMSA[2]					
	Total Cost Per Child Served	No. of Valid Cases	Total Cost Per Planned Enrollee	No. of Valid Cases	ACYF Funding Per Child Served	No. of Valid Cases
Federal Region						
1	$2,001	21	$2,204	22	$1,430	28
2	2,693	33	2,857	33	1,848	38
3	2,368	38	2,549	39	1,557	46
4	1,978	61	2,080	61	1,280	66
5	1,660	59	1,817	59	1,123	69
6	1,618	36	1,750	36	1,047	48
7	1,797	13	2,051	13	1,198	19
8	1,698	17	1,944	17	1,138	17
9	2,051	27	2,282	27	1,418	31
10	2,210	15	2,612	15	1,393	15
IMPD[3]	2,128	9	2,314	9	1,372	12
SMSA Average	1,999	329	2,165	311	1,331	389
	Non-SMSA					
Federal Region						
1	2,139	27	2,207	27	1,400	29
2	2,594	25	2,912	25	1,715	26
3	2,120	45	2,191	45	1,442	48
4	1,736	105	1,827	106	1,175	114
5	1,612	69	1,755	70	1,072	76
6	1,411	68	1,544	67	954	80
7	1,767	36	2,003	36	1,233	36
8	1,735	28	1,921	28	1,230	29
9	2,163	20	2,298	20	1,461	22
10	1,988	29	2,292	29	1,328	32
IMPD	2,000	40	2,046	44	1,430	52
Non-SMSA Average	1,832	496	1,970	497	1,241	544

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] SMSA: Standard Metropolitan Statistical Area

[3] IMPD: Indian and Migrant Program Division

The cost differences across regions by SMSA status also have narrowed in some instances relative to regional cost differences in Table IV-5, which does not break down regional costs by SMSA status. For instance, the cost difference between the low cost Region VI and the high cost Region II for SMSA areas is $1,074 (= $2,693 - $1,618), compared to the overall cost difference of $1,199 (= $2,651 - $1,482) in Table IV-5. In other instances, though, separating regional costs by SMSA status does not narrow regional cost differences. The cost difference, for example, between Regions IV and V for SMSA areas is $318 (= $1,978 - $1,660), compared to only $191.00 ($1,825 - $1,634) for SMSA and non-SMSA areas combined.

3. Cost Comparisons Between Part-Day and Full-Day Operations

Total cost per child and ACYF funding per child are presented for part-day and full-day program operations at the grantee level in Tables IV-7 and IV-8, respectively. Table IV-9 contains the respective cost measures by federal region. (The unit of analysis, though, is not the grantee, as discussed previously in Section B of this chapter). Findings include:

- The overall total cost per child for full-day operations is $2,385 compared to a lower $1,869 for part-day operations.
- Other than the magnitude of cost differences between part-day and full-day programs, patterns of cost differences across program characteristics and geographic location appear similar to the patterns revealed previously.

As discussed previously, the poor quality of the PIR data precludes the presentation of actual figures for cost measures on an hourly basis. However, if certain assumptions can be made about Head Start days and hours of operation, useful heuristic comparisons can be developed here.

In particular, reasonable assumptions on days and hours of operation for a "typical" Head Start program may be:

- Assumption 1 - The typical Head Start program operates for 200 days during the reporting period.
- Assumption 2 - The part-day program operates for 4 hours within an operating day.
- Assumption 3 - The full-day program operates for 6 hours within an operating day.

TABLE IV-7

AVERAGE VALUES[1] OF COST PER CHILD MEASURES FOR PART-DAY PROGRAMS[2], BY PROGRAM CHARACTERISTIC AND SMSA STATUS

Program Characteristic	Part-Day Operations at the Grantee Level			
	Total Cost Per Child Served	No. of Valid Cases	ACYF Funding Per Child Served	No. of Valid Cases
Program Auspice				
Community Action Agency (CAA)	$1,839	493	$1,237	541
School	1,845	63	1,162	75
Other[3]	1,940	195	1,326	207
Agency Organization				
Grantee Only	1,824	628	1,230	692
Central Office	2,180	74	1,442	79
Grantee with Delegates	1,947	70	1,289	75
No. of Delegate Agencies Administered by Grantee				
0	1,828	631	1,231	695
1	2,206	62	1,528	69
2-5	1,967	58	1,248	60
6-64	1,832	21	1,177	22
SMSA[4] Status				
SMSA	1,959	321	1,285	359
Non-SMSA	1,805	451	1,232	487
OVERALL AVERAGE	1,869	772	1,255	846

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Separation of part-day and full-day operations within grantees implies that the unit of analysis is either the part-day or full-day operation within the grantee. Grantees may have part-day, full-day, or both types of operations. Thus, instead of the 979 possible cases when the unit of analysis is the grantee , there are now 1,120 possible cases. However, because of missing values, the number of valid cases for a particular variable for part-day and full-day operations do not sum to the total.

[3] Other includes local governments, colleges, private non-profit organizations.

[4] SMSA: Standard Metropolitan Statistical Area

TABLE IV-8

AVERAGE VALUES[1] OF COST PER CHILD MEASURES FOR FULL-DAY PROGRAMS[2], BY PROGRAM CHARACTERISTIC AND SMSA STATUS

Program Characteristic	Full-Day Operations at the Grantee Level			
	Total Cost Per Child Served	No. of Valid Cases	ACYF Funding Per Child Served	No. of Valid Cases
Program Auspice				
Community Action Agency (CAA)	$2,363	132	$1,560	167
School	2,445	15	1,369	19
Other[3]	2,405	43	1,558	52
Agency Organization				
Grantee Only	2,163	138	1,420	174
Central Office	3,364	29	2,059	36
Grantee with Delegates	2,466	28	1,590	36
No. of Delegate Agencies Administered by Grantee				
0	2,171	140	1,424	176
1	3,081	20	1,859	30
2-5	2,885	26	1,867	29
6-64	2,724	9	1,633	11
SMSA Status				
SMSA[4]	2,632	101	1,700	132
Non-SMSA	2,107	93	1,350	113
OVERALL AVERAGE	2,385	195	1,538	246

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Full-day operation implies that the unit of analysis is the full-day operation within the grantee.

[3] Other includes local governments, colleges, private non-profit organizations.

[4] SMSA: Standard Metropolitan Statistical Area

TABLE IV-9

AVERAGE VALUES[1] OF COST PER CHILD MEASURES FOR PART-DAY AND FULL-DAY OPERATIONS AT THE GRANTEE LEVEL[2], BY REGION

	Part-Day				Full-Day			
	Total Cost Per Child Served	No. of Valid Cases	ACYF Funding Per Child Served	No. of Valid Cases	Total Cost Per Child Served	No. of Valid Cases	ACYF Funding Per Child Served	No. of Valid Cases
Federal Region								
1	$2,168	52	$1,445	57	$3,493	5	$1,915	9
2	2,470	47	1,644	50	3,222	23	2,123	27
3	2,078	73	1,403	81	3,172	31	1,969	38
4	1,807	146	1,206	157	2,015	38	1,339	43
5	1,684	136	1,122	150	1,968	12	1,426	16
6	1,437	85	945	105	1,681	51	1,101	62
7	1,746	55	1,232	56	3,040	6	1,861	12
8	1,716	44	1,183	45	2,325	5	1,455	5
9	2,028	48	1,389	51	3,414	5	1,777	9
10	2,111	45	1,375	48	2,934	3	2,060	3
IMPD[3]	2,039	41	1,462	46	2,094	16	1,299	22
OVERALL AVERAGE	1,869	772	1,255	846	2,385	195	1,538	246

---

[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Separation of part-day and full-day operations within grantees implies that the unit of analysis is either the part-day or full-day operation within the grantee. Grantees may have both.

[3] IMPD: Indian and Migrant Program Division

Based upon these assumptions, the above total cost per child figures of $2,385 for full-day operations and $1,869 for part-day operations can be converted into hourly figures.

The results are: $1.99 per hour per child for full-day operations; $2.34 per hour per child for part-day operations. Based on these assumptions then, one could conclude that part-day programs are approximately 18 percent more costly than full-day programs on an hourly basis. However, even if the above assumptions were accurate, additional qualifications would have to be placed on this result. In particular, nothing can be said here with regard to quality of program differences and varying impacts on Head Start children who are in part-day vs full-day programs.

4. Cost Per Child at the Survey Respondent Level

For comparative purposes, Table IV-10 presents cost per child measures by program characteristics for respondents. That is, in Table IV-10 the unit of analysis are PIR survey respondents, comprised of 805 grantee programs only, 520 delegate agencies, and 82 grantee programs exclusive of their respective 520 delegates. The 90 central office grantee respondents, who did not operate any of their own Head Start programs, are not included in the total 1,407 respondents reported in Table IV-10. As discussed earlier in this report, PIR data on the 520 delegate agencies are not aggregated within their respective grantee programs in the respondent data file, in contrast to the grantee data file, which does contain such aggregation.

The results in Table IV-10 can be compared to results in Table IV-3 and other previous tables. In particular, comparisons include:

- The overall total cost per child of $1,902 for respondents is almost identical to the $1,900 for the aggregated grantees.
- The cost difference between CAA's and schools is considerably wider for respondents than it is for grantees. That is, CAA's total cost per child is only $26 greater than schools at the grantee level, but almost $200 greater than schools at the respondent level. This result can be traced to a lower cost per child for school delegate agencies relative to school grantee programs.
- For part-day model program types in Table IV-10 (standard model, variation model, etc.) cost variations among models is very narrow, except for a low total cost per child of $1,625 for home-based models as one might expect.
- Economies of program size are evident for both respondents and grantees, but the program size of over 500 enrollees has a smaller total cost per child of $1,770 for respondents compared to $1,905 for the same size category for grantee organizations.

TABLE IV-10

AVERAGE VALUES[1] OF COST PER CHILD MEASURES BY PROGRAM CHARACTERISTICS, FOR THE INDIVIDUAL SURVEY RESPONDENTS

Program Characteristic	Total Cost Per Child Served	No. of Valid Cases	Program Characteristic/ Geograph. Location	Total Cost Per Child Served	No. of Valid Cases
Program Auspice			Program Size		
Community Action Agency (CAA)	$1,870	486	Less than 101 Enrollees	$2,057	456
School	1,671	213	101-250 Enrollees	1,807	400
Other[2]	2,052	402	251-500 Enrollees	1,780	169
			Over 500 Enrollees	1,770	95
Agency Organization			SMSA[4]/Status		
Delegate Agency	1,877	356	SMSA	1,995	556
Grantee Only	1,873	703			
Grantee with Delegates	2,373	61	Non-SMSA	1,807	563
Program Type			Region		
Part-Day Only	1,811	891	1	2,199	65
Full-Day Only	2,330	171	2	2,328	158
Both	2,030	58	3	2,261	108
			4	1,772	194
Part-Day Model			5	1,666	179
Standard	1,847	352	6	1,457	135
Variation	1,799	110	7	1,821	57
Double Session	1,836	119	8	1,721	46
Home Based	1,625	13	9	1,877	78
Locally Designed	1,814	29	10	2,098	46
Combination [6]	1,807	311	IMPD[5]	2,044	54
OVERALL AVERAGE	$1,902	1,120			

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[1] Note that the descriptive statistics presented were derived by using the individual respondent calculated ratios. Thus, they represent the average ratio per respondent and are not necessarily the same ratio that would be obtained by first summing across respondents to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Other includes local governments, colleges, private non-profit organizations.

[3] Enrollees served by Head Start, as opposed to planned enrollment.

[4] SMSA: Standard Metropolitan Statistical Area

[5] IMPD: Indian and Migrant Program Division

[6] Combination refers to any respondent with two or more of the five types of part-day models, including standard model, variation model, double session model, etc.

As an additional note on the effects of enrollment size on costs per child at the respondent level, Table IV-11 presents average total costs per child by enrollment size, agency organization, and program type combined. Findings include:

- The size category of 251 to 500 enrollees (which had the lowest costs per child for grantees in Table IV-3) has the lowest cost per child average only for the category of part-day "Grantee Program Only." "Grantee Program Only," though, has more respondents than the other agency organization categories combined.
- The size category of 101 to 250 enrollees appears to be the optimal size for "Delegate Agencies" and "Grantees With Delegates" with respect to costs.

5. Handicapped Funding and Food Cost Per Child

Tables IV-12 and IV-13 present handicapped funds per handicapped child and USDA reimbursed food costs per child, respectively, by program characteristic and geographic location. Table IV-12 reveals that:

- The "other" category for program auspice expends more funds per handicapped child than the other program auspices do ($545 vs $469 for CAA's and $456 for schools).
- Central office grantees spend a high of $738 per handicapped child; grantees with two to five delegates spend $707 per child compared to an average of $487.*
- Region IV spends the least per handicapped child ($292), while Region II and IMPD have the highest handicapped cost figures ($684 and $685, respectively).
- Both SMSA programs and non-SMSA programs expend roughly the same amount per child ($472 and $498, respectively).

The cost indicators for handicapped children point here more to differences in funding per child than they do to cost differences. That is, the amount of service provided to a handicapped child may impact critically on cost differences, but no control for differences in services can be made with the PIR data.

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*Recall from previous discussion in this chapter, though, that some double counting of funds may be associated with "Central Office" PIR reports.

TABLE IV-11

AVERAGE VALUES[1] OF TOTAL COST PER CHILD SERVED FOR PART-DAY AND FULL-DAY PROGRAMS[2] BY PROGRAM CATEGORY, FOR THE INDIVIDUAL SURVEY RESPONDENTS

PROGRAM CHARACTERISTICS	Delegate Agency				Grantee Program Only				Grantee With Delegate(s)			
	Part-Day	No. of Valid Cases	Full-Day or Both	No. of Valid Cases	Part-Day	No. of Valid Cases	Full-Day or Both	No. of Valid Cases	Part-Day	No. of Valid Cases	Full-Day or Both	No. of Valid Cases
Program Size												
Less than 101 Enrollees[3]	$1,764	137	$2,791	41	$1,953	215	$2,473	41	$2,797	15	$2,663	7
101-250 Enrollees	1,571	76	2,063	29	1,785	228	1,969	45	1,868	14	2,720	8
251-500 Enrollees	1,742	36	2,407	11	1,643	92	1,982	21	2,098	9	--	0
Over 500 Enrollees	1,699	25	1,182	1	1,808	37	1,676	24	2,212	7	1,897	1
OVERALL AVERAGE	1,702	274	2,463	82	1,827	572	2,075	131	2,277	45	2,644	16

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[1] Note that the descriptive statistics presented were derived by using the individual respondent calculated ratios. Thus, they represent the average value per respondent and are not necessarily the same ratio that would be obtained by first summing across respondents to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Segregation of part-day and full-day operations implies that the unit of analysis is either the part-day or full-day operation within the individual respondent.

[3] Enrollees served by Head Start, as opposed to planned enrollment.

TABLE IV-12

AVERAGE VALUES[1] OF HANDICAPPED FUNDS PER HANDICAPPED CHILD BY PROGRAM CHARACTERISTIC AND GEOGRAPHIC LOCATION

Program Characteristic	Handicapped Funds Per Handicapped Child Served	No. of Valid Cases
Program Auspice		
Community Action Agency (CAA)	$469	523
School	456	78
Other[2]	545	211
Agency Organization		
Grantee Only	461	708
Central Office	738	63
Grantee with Delegates	546	58
No. of Delgate Agencies Administered by Grantee		
0	463	712
1	541	47
2-5	707	50
6-64	662	20
Program Size		
Less than 101 Enrollees[3]	542	270
101-250 Enrollees	431	310
251-500 Enrollees	464	147
Over 500 Enrollees	543	99

Geographic Location	Handicapped Funds Per Handicapped Child Served	No. of Valid Cases
Federal Region		
1	$509	52
2	684	62
3	437	85
4	528	167
5	458	129
6	292	102
7	500	46
8	550	45
9	389	57
10	455	43
IMPD[4]	685	51
SMSA[5] Status		
SMSA	472	340
Non-SMSA	498	488
OVERALL AVERAGE	487	829

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[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Other includes local governments, colleges, private non-profit organizations.

[3] Enrollees served by Head Start, as opposed to planned enrollment.

[4] IMPD: Indian and Migrant Program Division

[5] SMSA: Standard Metropolitan Statistical Area

TABLE IV-13

AVERAGE VALUES[1] OF USDA REIMBURSED FOOD COSTS PER CHILD, BY PROGRAM CHARACTERISTIC AND GEOGRAPHIC LOCATION

Program Characteristic	Food Cost Per Child Served	No. of Valid Cases
Program Auspice		
Community Action Agency (CAA)	$104	578
School	59	80
Other[2]	102	231
Agency Organization		
Grantee Only	100	771
Central Office	108	64
Grantee with Delegates	94	77
No. of Delgate Agencies Administered by Grantee		
0	100	775
1	110	60
2-5	94	55
6-64	81	22
Program Size		
Less than 101 Enrollees[3]	94	290
101-250 Enrollees	100	343
251-500 Enrollees	101	162
Over 500 Enrollees	115	117

Geographic Location	Food Cost Per Child Served	No. of Valid Cases
Federal Region		
1	$ 95	55
2	114	66
3	103	87
4	130	175
5	66	144
6	122	126
7	87	55
8	88	45
9	85	50
10	76	46
IMPD[4]	106	63
SMSA[5] Status		
SMSA	104	376
Non-SMSA	97	535
OVERALL AVERAGE	100	912

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[1] Note that the descriptive statistics presented were derived by using the individual grantee calculated ratios. Thus, they represent the average ratio per grantee and are not necessarily the same ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the ratio.

[2] Other includes local governments, colleges, private non-profit organizations.

[3] Enrollees served by Head Start, as opposed to planned enrollment.

[4] IMPD: Indian and Migrant Program Division

[5] SMSA: Standard Metropolitan Statistical Area

Table IV-12, which presents food costs per child*, shows little cost variations except for program auspice. Specific findings include:

- Schools expend a relatively much lower $59 per child on food costs (USDA reimbursed), compared to $104 for CAA's or $102 for "other."
- Programs with enrollment sizes of over 500 children spend an above average of $115 on food costs per child, although grantees with over five delegates expend a below average of $81 per child.
- Region V spends the least amount on food per child ($66), while Region IV spends the most ($130). Region VI, generally a low-cost region, has an above average figure of $112 on food costs per child.
- Food costs per child are a little higher in SMSA's ($104 vs $97).

Regression analysis of food costs in Chapter V relates the level of food services provided per child to food cost measures per child.

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*An alternative measure of food costs would have been food costs per meal, rather than food costs per child, for the operating period. However, a measure on a per meal basis derived from the PIR would require data on the number of operating days within the reporting period. As discussed previously (in Chapter III), PIR data on days of operation are unreliable. Also, food costs cover snacks as well as meals, and this would complicate attempts to calculate per meal food cost measures based upon PIR data.

CHAPTER V

ANALYSIS OF FACTORS RELATED TO HEAD START COSTS PER CHILD

Chapter V is a continuation of the cost analysis previously presented in Chapter IV. It attempts, at a more sophisticated level, to assess the factors which may relate to and impact upon cost per child differences across individual grantees. In particular, multiple regression analysis is used to assess the simultaneous effects of several important factors on cost measures. These factors include child/staff ratios, regional salary differences, agency organization, SMSA* vs non-SMSA location, enrollment size, and others.

Chapter V consists of three major sections:

- Study Objectives and Methodology
- Definition of Variables and Data Qualifications
- Findings and Conclusions

Within the Findings and Conclusions Section, the major topical headings are:

- Distribution of Grantees by Cost and Program Categories
- Geographic Differences in Teacher Salaries/Cost-of-Living
- Regression Analysis of Factors Related to Cost Per Child Measures
- Regression Analysis of Handicapped Costs Per Handicapped Child and Food Costs Per Child

A. Study Objectives and Methodology

1. Study Objectives

Study Questions

The previous chapter (Chapter IV) addressed the study objectives of what are Head Start costs per child and cost differences among program types. In this chapter the emphasis is directed more at identifying factors which explain or relate to cost variations across individual grantees. Study questions in this regard include:

- What are the most important factors (e.g., program operation, program characteristics, location) which can explain or relate to cost per child differences among Head Start grantees?

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*SMSA: Standard Metropolitan Statistical Area

- How do costs vary among individual programs within a particular program type or cluster? What program characteristics are most related to cost variation among programs of a similar type?
- What are statistically appropriate ranges of cost for programs of a particular type or for particular types of program activities, e.g., health services? What are tolerable "cost limits" beyond which individual programs can be determined to be significantly at variance with similar programs?
- How does program quality vary in relation to program cost? Do the more costly programs (in terms of overall cost per child) tend to achieve a higher degree of compliance with Head Start Performance Standards than the less costly ones? In which program component areas is the relation between cost and compliance strongest/weakest?

Simultaneous Impact of Cost-Related Factors

One important study issue recognized here is the simultaneity of cost-related factors. Cost differences across program types and individual grantees can be affected by several factors at any given time. Costs may vary significantly across program type due to various influencing factors such as child/staff ratios, program size, or geographic differences in average teachers' salaries. Cost differences across program types may diminish after taking into account these factors. IMPD* programs, for example, have relatively** high total costs per child served compared to other program types, but they also have relatively low child/staff ratios which explains, in part, the higher cost per child for IMPD. As another example, larger size programs may be able to "economize" on their costs due to a larger scale of operation (e.g., the costs for administrative overhead may be less per child when there is a greater number of children in a program). The lower cost for larger programs, though, may tend to be offset generally by their location in urban, rather than rural areas. The cost-of-living is generally higher in urban areas. In other words, the relatively low cost per child of large programs in urban areas would be even lower after "controlling" or "holding constant" the urban/rural factor.

Determination of Appropriate Cost Ranges and Cost Limits

Another study issue of interest here is the question of determining "appropriate" ranges of cost variation or "tolerable cost limits" for individual Head Start programs. The determination of such cost ranges or limits cannot be done only by statistical analysis. It also requires the active participation of policy staff at ACYF and the regional office.

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*IMPD: Indian and Migrant Program Division

**Relative to the overall average.

The statistical analysis in this study provides a starting basis with which additional steps can be taken to determine appropriate ranges for costs. In particular, legitimate cost differences across programs of a particular type may be attributed to various explanatory factors such as geographic location, variations in staff training/experience levels, or the amounts and kinds of special supportive services provided. Tolerable "cost limits" may be defined according to significant cost differences which still remain after controlling for these factors. The question of what constitutes a "legitimate" factor would have to be addressed by policy staff.

Even if management and administrative decisions are to be based on this kind of approach, additional steps would be required to explore the specific reasons why the program has deviated beyond a statistically established range of cost variation. The local environment in which some programs operate or the unique organizational structure may pose problems which cannot be resolved without jeopardizing the program, services, or levels of compliance. Hence, it may be difficult to set tolerable "cost limits," although certainly it will be useful to determine programs which go beyond the standard limits and those which are significantly at variance with cost norms. These programs should be monitored to determine the specific reasons for the cost deviation and whether it is due to mismanagement or administrative deficiency or to external circumstances beyond the control of the program.

Program Quality and Costs

The relation between Head Start program costs and program quality or compliance is one of the original study questions. Unfortunately, the PIR does not contain quality or compliance data. However, Development Associates as another part of this project conducted a pilot, exploratory study of program compliance, based upon data obtained from the Head Start Performance Standards Self-Assessment and Validation Instrument. The results are reported under separate cover.

2. Methodology

The important components of the overall methodology used in this chapter include:

- Cross-tabulations which display bivariate (two-variable) frequency distributions of grantees according to cost categories (high, medium, low) and program categories (program auspice, agency organization).

- Regional salary differences of teachers which serve as a proxy for average differences in market salaries of Head Start staff across geographic areas.*
- Multiple regression analysis which is used to assess the simultaneous effects of several important factors on cost per child measures.

Cross-Tabulation Analysis

For the cross-tabulation analysis in this chapter, cost and program variables are expressed in categorical form. The categories for the total cost per child variable (based on actual enrollment) are:

- Low cost grantees - Less than $1,500 total cost per child served.
- Medium cost grantees - $1,500 to $2,300 total cost per child served**.
- High cost grantees - More than $2,300 total cost per child served.

The categories for the child/staff ratios (based on total staff) consist of:

- Less than 3 children per staff member.
- 3 to 5 children per staff member.
- 5 to 7 children per staff member.
- 7 or more children per staff member.

The frequency of grantees according to both cost per child and child/staff categories combined in a cross-tabulation effectively demonstrates the relation between these two variables. In particular, it is shown that a high frequency of grantees occurs with the combination of the high cost category and low child/staff ratio or, alternatively, with the low cost category and high child/staff ratio. Relations of this nature are also shown between cost per child categories and program auspice and between cost and agency organization.

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*It should be emphasized that this is a proxy measure only since not all Head Start programs, particularly those non-school community action programs, will compete in the salary market regardless of the geographic area. For example, Head Start teachers may have a relatively stable range of costs despite geographic differences. This is discussed at greater length later in this section.

**Recall from Chapter IV that the overall average total cost per child served is $1,900.

Regional Salary Differences

An important issue in this study is the determination of Head Start program costs and how program costs relate to various characteristics of the program. In order to accurately assess the degree of relationship between costs and a specified program characteristic (e.g., program type), intervening factors should be controlled for. One important intervening factor is the variation in salary levels of Head Start staff across geographic areas. Salary levels for elementary school teachers and day care workers, for instance, are likely to be much higher in New York City than in rural Alabama. Serious biases in the empirical results for cost relationships are likely to occur if this type of difference is not controlled for.

The importance of salaries to Head Start costs can be further demonstrated by two factors:

- The proportion of total Head Start costs made up by staff salaries.
- Variation in salaries from one location to another.

A greater proportion or a greater variation in salaries implies a greater impact of salaries on Head Start costs. In Development Associates' Final Report on Head Start Cost Analysis (May 30, 1975) it was estimated that approximately 70-80 percent of all Head Start costs can be attributed to personnel. The education component comprised over 40 percent of Head Start funds. Furthermore, the average Head Start cost for teachers and aides varied widely from $2,488 to $7,275, based upon a sample of fifteen (15) Head Start programs.

However, the PIR data base does not contain any data on salaries of Head Start program staff. Hence, we have had to obtain information pertaining to salaries from secondary sources. Even if the PIR did provide salary data for individuals, market salary data would still be more appropriate for controlling for aggregate market differences, as discussed above.

Since the larger portion of Head Start personnel is comprised of teachers, our search for secondary data has focused on obtaining average salaries for teachers by geographic location. We would expect that variation in teacher's salaries across areas would be representative of variation in salaries of other Head Start personnel as well, particularly for program administrators and teachers' aides. Variations in teachers' salaries would be representative for these other categories of workers insofar as such variations generally reflect cost of living differences and educational market differences. Another reason for focusing our efforts on obtaining teachers' salaries is their greater availability relative to other categories of workers*.

In general, factors contributing to salary differences across geographic areas may include:

(1) Variations in cost-of-living.

(2) Variations in the average quality or educational training level of teachers in one geographic area relative to another.

(3) Variations in the market for teachers in a given area, in terms of the relative demand for them and their supply. E.g., a school district's demand for teachers would decline if the school enrollment population was declining.

Our objective in using salary data from secondary sources is to control for variations in salary levels across geographic areas attributable to (1) cost of living differences and (3) market salary differences, but not to (2) quality of staff differences. For the latter differences, we would hope ideally to control by identifying characteristics of staff specific to each site (e.g., the extent of educational training of program staff). Cost-of-living differences are essentially "external" influences upon a program which are outside a program's immediate control, but quality of staff is not.

It should be emphasized that a measure of variation in salaries, rather than levels, is required to represent variation in market salaries for Head Start personnel. For example, average salaries for teachers in public elementary and secondary schools may have a higher level than the level of salaries of instructional staff in Head Start programs. But variations in public school teachers' salaries should closely approximate variations in Head Start teachers' salaries across broad geographic areas. Also, the teacher salary variable represents a wage index, rather than a social cost-of-living index. Teachers' salaries correspond more closely to the kind of costs incurred by Head Start programs than cost-of-living indices.**

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*Five alternative sources on teachers' salaries were investigated for their potential usefulness to this study. Only one source (Bureau of the Census, Local Government Employment in Selected Metropolitan Areas and Large Counties: 1976) stands out clearly in terms of both accessibility and level of geographic detail. A discussion of each potential source and its limitation is contained in Appendix B.

**Cost-of-living indexes pertain to a family of four persons living on a standard budget in an urban area.

Multiple Regression Analysis

Multiple regression analysis is a powerful empirical tool for examining simultaneous relationships between several independent variables and a key criterion or dependent variable. It allows one to focus on the effects of a particular independent variable on the dependent variable while controlling for or "holding constant" the intervening effects of other independent variables. It also lends itself to tests of statistical significance, more readily so within the context of the analysis here relative to such techniques as ANOVA (analysis of variance) testing.

The tool of regression analysis is designed to assess whether or not relationships between variables are positive or negative and the magnitude of an independent factor's effect or relation on the dependent variable. The statistical tests associated with the regressions allow us to assess whether or not the degree of relationships between the dependent variable and each of the independent variables is statistically significant. In other words, the statistical tests indicate whether or not a relationship between the criterion variable and an independent factor exists and provides some indication of the strength of the relationship.

Regression analysis and other empirical techniques may be very useful for assessing relationships among variables or factors, especially in this study where the dependent variable is a cost per child measure. However, analytical tools do not necessarily prove causal relationships, where in a number of instances results may be simply of a coincidental nature. Also, the cost analyses in this report are not exhaustive in that many relevant factors or issues could not be fully addressed with the available data. For instance, the cost efficiency of a Head Start program may be largely affected by how the program is operated at the administrative level. Not only the composition of administrative staff, but also how administrative decisions are made may impact critically upon a program's costs. Qualitative aspects of decision-making process are often important but difficult to quantify. This is a key point to consider in questions dealing with relative costs of program operation.

B. Definition of Variables and Data Qualifications

1. Definition of Variables

Measures on the cost per child (served) were defined previously in Chapter IV. Total costs, in particular, includes: ACYF grant award, ACYF handicapped funding, non-federal share, USDA reimbursement for food services, and other costs. The cost per child measures in this chapter are based mostly on actual enrollment. The unit of analysis is the grantee, not the survey respondent.

The independent variables in the regression equations are defined as specified in previous chapters. To facilitate interpretations of regression results, the categorical variables of agency organization, program auspice, and non-SMSA vs SMSA location have been coded with values of 0 and 1. With this procedure the value of "1" represents the presence of a certain program characteristic (e.g., program is located in an SMSA area) while the value of "0" represents an alternative characteristic (e.g., program is located in an non-SMSA). The regression coefficient for the categorical variable then conveniently represents the cost difference between programs of one type versus an alternative type.

The categorical variables specified in the regression equations are as follows:

- Agency Without Delegates vs With Delegates
  - Agency Without Delegates = 0
  - Agency With Delegates = 1
- Non-SMSA vs SMSA
  - Non-SMSA = 0
  - SMSA = 1
- School vs All Other
  - School = 0
  - All Other = 1
- CAA vs All Other
  - CAA = 0
  - All Other = 1

2. Data Qualifications

Qualifications to the variables analyzed in this chapter are discussed in detail in previous chapters. Qualifications to the cost per child measures, in particular, are addressed in Chapter IV.

C. Findings and Conclusions

1. Distribution of Grantees By Cost and Program Categories

The child/staff ratio is an important program operation variable impacting upon total cost per child. The frequency distribution of grantees according to cost and child/staff ratios combined is presented in Table V-1. The cost regression findings which follow later in this chapter provide further evidence of the strong relation between child/staff* ratio and cost per child

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*Staff here is inclusive of all Head Start paid staff within a grantee organization.

TABLE V-1

PERCENT DISTRIBUTION ON TOTAL COST PER CHILD, BY CHILD/STAFF[1] RATIOS

Total Cost Per Served Child	Child/Staff Ratios (Based on Actual Enrollment)				
	Less Than 3	3 to 4.9	5 to 6.9	7 or more	Average
Less than $1,500	11.5%[2] (n=6)[3]	13.5% (n=47)	31.3% (n=91)	64.0% (n=64)	26.3% (n=208)
$1,500 to 2,299	38.5 (n=20)	61.2 (n=213)	57.0 (n=166)	32.0 (n=32)	54.5 (n=431)
$2,300 or more	50.0 (n=26)	25.3 (n=88)	11.7 (n=34)	4.0 (n=4)	19.2 (n=152)
Column Total	100.0% (n=52)	100.0% (n=348)	100.0% (n=291)	100.0% (n=100)	100.0% (n=791)

Total Cost Per Planned Enrollee	Child/Staff Ratios (Based on Planned Enrollment)				
	Less Than 3	3 to 4.9	5 to 6.9	7 or more	Average
Less than $1,500	8.0% (n=6)	9.3% (n=38)	20.8% (n=49)	50.0% (n=36)	16.3% (n=129)
$1,500 to 2,299	41.3 (n=31)	60.5 (n=248)	64.4 (n=152)	44.4 (n=32)	58.4 (n=463)
$2,300 or more	50.7 (n=38)	30.2 (n=124)	14.8 (n=35)	5.6 (n=4)	25.3 (n=201)
Column Total	100.0% (n=75)	100.0% (n=410)	100.0% (n=236)	100.0% (n=72)	100.0% (n=793)

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[1] Staff here is inclusive of all Head Start paid staff within a grantee organization.

[2] Column percents only are given here. E.g., in the first column, 11.5% plus 38.5% plus 50.0% equal 100%.

[3] The "n" refers to the number of valid cases.

measures when the effects of other factors on cost are accounted for.

The top part of Table V-1 presents the percentage distributions for total cost per child and child/staff ratios based on actual enrollment, while the bottom part displays the distributions for total cost per planned enrollment and child/staff ratios based on planned enrollment. Both parts of Table V-1 demonstrate a negative relationship between child/staff ratios and costs per child. More specifically, the findings include:

- Grantee with high child/staff ratios (5 or more) tend to cluster more in the low cost and medium cost categories.
- Grantees with low child/staff ratios (less than 5) display higher percents in the high cost category relative to grantees with higher child/staff ratios.
- Almost half of all the grantees fall into the medium cost range for child/staff ratios ranging from 3 to 5 and 5 to 7 (for respective measures based on both actual and planned enrollment).

Table V-2 shows the percent distributions of grantees according to cost and program characteristic categories. The top half of Table V-2 shows the distribution of grantees according to low, medium, and high cost (per actual enrollee) categories and according to program auspice (CAA, school, and other). The bottom half of Table V-2 shows the distribution of grantees according to cost (per planned enrollee) and agency organization categories (grantees without delegates vs grantees with delegates). The findings include:

- The overall distribution of grantees according to cost (per actual enrollee) category is that 26 percent of the grantees are low cost programs, 54 percent medium cost programs, and 20 percent high cost programs (as indicated by the extreme right column in the top half of Table V-2).
- CAA's have a below average percent of grantees in the medium cost category (51.7 percent for CAA's vs the average of 54.3 percent), but they also have an above average percent in the low cost category (28.7 percent vs the average 26 percent).
- Schools, whose overall total cost per child is similar to CAA's have a slightly below average percent of grantees in the low cost category (25.7 percent vs the average 26.0 percent), but they also have a below average percent in the high cost category (15.7 percent vs the average 19.7 percent).

TABLE V-2

PERCENTAGE DISTRIBUTION ON TOTAL COST PER CHILD, BY PROGRAM CHARACTERISTIC

Total Cost Per Child Served	Program Auspice			
	CAA[1]	School	Other	Average
Less than $1,500	28.7%[2] (n=150)[3]	25.7% (n=18)	19.5% (n=42)	26.0% (n=210)
$1,500 to 2,299	51.7 (n=270)	58.6 (n=41)	59.1 (n=127)	54.3 (n=438)
$2,300 or more	19.6 (n=102)	15.7 (n=11)	21.4 (n=46)	19.7 (n=159)
Column Total	100.0% (n=522)	100.0% (n=70)	100.0% (n=215)	100.0% (n=807)

	Agency Organization		
	Grantee Without Delegates	Grantee With Delegates	Average
Less than $1,500	17.0% (n=120)	12.3% (n=15)	16.3% (n=135)
$1,500 to 2,299	59.4 (n=419)	49.2 (n=60)	57.9 (n=479)
$2,300 or more	23.6 (n=166)	38.5 (n=47)	25.8 (n=213)
Column Total	100.0% (n=705)	100.0% (n=122)	100.0% (n=827)

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[1] CAA: Community Action Agency.

[2] Column percents only are given here. E.g., in the first column, 28.7% plus 51.7% plus 19.6% equal 100%.

[3] The "n" refers to the number of valid cases.

- The "other" category for program auspice has both the lowest percent of grantees in the low cost category and the highest percent of grantees in the high cost category.

- Grantees with delegates represent a much higher percent in the high cost category (38.5 percent), compared to the respective percent for grantees without delegates (23.6 percent). Likewise, grantees with delegates represent a lower percent in the low cost category (12.3 percent), compared to the respective percent for grantees without delegates (17 percent).

Overall then, Tables V-1 and V-2 clearly associate the following traits with high cost (per child) grantees: (1) low child/staff ratios; (2) "other" program auspice; and (3) grantees with delegates.

These tables have demonstrated relationships between cost per child measures and three cost-related factors: child/staff ratios; program auspice; and agency organization. These tables represent a one-dimensional analysis in that each of these factors are examined separately and singularly. The cost regression analysis examines the effects of these and other factors in a multi-dimensional and simultaneous manner. Cost differences among different types of grantees by program auspice may be smaller, for instance, after taking into account differences in child/staff ratios.

2. Geographic Differences in Teachers' Salaries

The teacher salary variable represents average teacher salaries for the ten federal regional areas plus IMPD. It is specified later in the regression equation in order to capture the intervening effects of major salary differences across geographic areas. The inclusion of a regional teacher salary variable in this study controls the cost-of-living differences and variations in demand/supply markets for teachers across geographic areas.*

The regional salary variable is expressed in Table V-3 in terms of average monthly salaries by federal region and IMPD. Table V-3 presents evidence on the positive relationship between average regional teacher salareis and Head Start costs per child. Both regional salaries and costs per child are ranked from high to low values. While there is not a perfect correspondence between the two rankings, the rankings are close enough to each other to indicate a definite trend. The dissimilarities in the rankings are due likely to other intervening effects such as regional differences in child/staff ratios for Head Start programs (which is addressed in the following section).

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*For discussion on the methodological development of the salary variable in this study, the reader is referred to Section A.2 of this chapter.

TABLE V-3

REGIONAL COST AND TEACHER SALARY DIFFERENCES

Region	Average Monthly Teacher Salaries[1]	Ranking From Hi to Lo	Average Total Cost Per Child	Ranking From Hi to Lo
1	$1,370	3	$2,079	4
2	1,483	1	2,651	1
3	1,304	5	2,234	2
4	1,014	10	1,824	7
5	1,339	4	1,634	10
6	1,203	9	1,482	11
7	1,007	11	1,775	8
8	1,224	7	1,721	9
9	1,425	2	2,099	3
10	1,203	8	2,064	5
IMPD[2]	1,301	6	2,046	6
Total	$1,321		$1,900	

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[1] Data on teacher salaries are derived from county census data: Local Government Employment in Selected Metropolitan Areas and Large Counties, 1976. Teacher salaries pertain to public school (elementary and secondary) only.

[2] IMPD: Indian and Migrant Program Division.

3. Regression Analysis of Factors Related to Cost Per Child Measures

Tables V-4 and V-5 present multiple regression estimates. Three different cost measures have been specified in both tables as alternative dependent variables in separate regression equations. The three dependent variables are total cost per child, ACYF plus non-federal shares per child, and ACYF cost (exclusive of handicapped funds) per child. Tables V-6 and V-7 present alternative specifications for the total cost per child measure only.*

Table V-5 presents a somewhat different specification than the regression equations in Table V-4 by modifying some of the independent variables and introducing new ones. The ratio of children to ACYF-paid staff is replaced by the ratio of children to total staff in Table V-5. The percent of ACYF-paid staff with CDA or BA credentials is introduced. The program auspice variable of school vs all other is replaced by CAA vs all other. The percent of enrollee dropouts is replaced by the percent of children four years of age and younger. Also, the total actual enrollment variable is omitted from Specification II in Table V-5.

Tables V-6 and V-7 present a modification of Specification II (Table V-5). In Table V-6 the percent of children four years and younger is replaced by the percent of children three years and younger. In Table V-7 the percent of children four years and younger is replaced by the number of meals served per child per day.

Summary Findings

The principal summary findings are as follows:

- Factors which from a statistical** standpoint have the greatest impact on the three respective cost measures are:
  - Child/total staff ratio or child/ACYF-paid staff ratio. (The level of statistical significance is higher for the child/total staff ratio relative to the child/ACYF-paid staff ratio.)

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*The lay reader who is unfamiliar with regression techniques does not need to refer to the tables for understanding. The text itself should be understandable without a familiarity with specific regression formulas or techniques.

**The t-statistics for each regression coefficient are presented in parentheses. For the number of observations or cases available in the regressions, a t-statistic of 2.33 or greater is statistically significant at the one percent level in a one-tailed hypothesis test, and a t-statistic of 1.65 or greater is significant at the five percent level.

TABLE V-4

REGRESSION ESTIMATES FOR COST PER CHILD SERVED MEASURES (SPECIFICATION I)

	Dependent Variable		
Independent Variables	Total Cost Per Child Served	ACYF Plus Non-Federal Shares Per Child Served	ACYF Cost Per Child Served
Child (Actual Enrollment)/ACYF-Paid Staff Ratio	-64 (8.3)**1/	-62 (9.9)**	-50 (10.0)**
Regional Salary	765 (5.2)**	677 (5.69)**	580 (6.2)**
Agency Without Del. vs With Del.	292 (4.6)**	253 (5.05)**	144 (3.7)**
Percent HS Families Receiving Social Services	1.04 (2.30)*	.75 (2.13)*	.44 (1.58)
Non-SMSA vs SMSA	137 (2.99)**	132 (3.60)**	77 (2.68)**
Actual Enrollment (logarithmic)	-58 (2.23)*	-36 (1.75)*	-23 (1.45)
School vs All Other2/	-95 (1.20)	-110 (1.81)*	15 (.30)
Percent Dropouts	-.39 (.21)	-3.51 (2.38)**	-2.10 (1.83)*
Constant	1,534	1,349	901
Adjusted R^2	.17	.20	.19
Degrees of Freedom	758	826	846

1/ The t-statistics are in parentheses below each regression coefficient. A t-statistic of 2.33 or greater is statistically significant at the one percent level (indicated by double asterisks) in a one-tail test; 1.65 at the five percent level (indicated by single asterisk).

2/ "All other" refers to CAA's and "other" program auspice.

TABLE V-5

REGRESSION ESTIMATES FOR COST PER CHILD SERVED MEASURES (SPECIFICATION II)

Independent Variables	Dependent Variable		
	Total Cost Per Child Served	ACYF Plus Non-Federal Shares Per Child Served	ACYF Cost Pe Child Serve
Child (Actual Enrollment)/Total Staff Ratio	-160 (14.1)**1/	-128 (13.7)**	-101 (13.8)**
Agency Without Del. vs With Del.	306 (5.4)**	252 (5.4)**	153 (4.2)**
Regional Salary	395 (2.8)**	386 (3.2)**	413 (4.4)**
Non-SMSA vs SMSA	156 (3.8)**	148 (4.3)**	93 (3.4)**
Percent HS Families Receiving Social Services	.79 (1.9)*	.68 (2.0)*	.35 (1.30)
Percent ACYF Staff With Degrees	5.31 (3.14)**	3.92 (2.8)**	1.47 (1.32)
CAA vs All Other2/	53 (1.3)	33 (.93)	17 (.61)
Percent Children 4 Years and Younger	.55 (.64)	.76 (1.03)	.18 (.31)
Constant	1,941	1,549	1,164
Adjusted R^2	.27	.26	.25
Degrees of Freedom	719	781	801

1/ The t-statistics are in parentheses below each regression coefficient. A t-statistic of 2.33 or greater is statistically significant at the one percent level (indicated b double asterisks) in a one-tail test; 1.65 at the five percent level (indicated by single asterisk).

2/ "All other" refers to schools and "other" program auspice.

TABLE V-5

REGRESSION ESTIMATES FOR COST PER CHILD SERVED MEASURES (SPECIFICATION III)

Independent Variables	Total Cost Per Child
Child (Actual Enrollment)/Total Staff Ratio	-160 (14.2)**[1]
Agency Without Del. vs With Del.	307 (5.50)**
Regional Salary	353 (2.60)**
Non-SMSA vs SMSA	152 (3.70)**
Percent ACYF Staff With Degrees	5.44 (3.23)**
Percent Children 3 Years and Younger	3.59 (2.97)**
Percent HS Families Receiving Social Services	.81 (1.96)*
CAA vs All Other[2]	58 (1.41)
Constant	1,970
Adjusted R^2	.28
Degrees of Freedom	719

---

[1] The t-statistics are in parentheses below each regression coefficient. A t-statistic of 2.33 or greater is statistically significant at the one percent level (indicated by double asterisks) in a one-tail test; 1.65 at the five percent level (indicated by single asterisk).

[2] "All other" refers to schools and "other" program auspice.

TABLE V-7

REGRESSION ESTIMATES FOR COST PER CHILD SERVED MEASURES (SPECIFICATION IV)

Independent Variables	Total Cost Per Child
Child (Actual Enrollment)/Total Staff Ratio	-149 (12.7)**[1]
Agency Without Del. vs With Del.	269 (4.8)**
Regional Salary	585 (4.2)**
No. of meals served per child Served per day	184 (4.1)**
Non-SMSA vs SMSA	149 (3.6)**
Percent ACYF Staff with Degrees	5.28 (3.2)**
Percent HS Families Receiving Social Services	.80 (1.9)*
CAA vs All Other[2]	62 (1.5)
Constant	1,485
Adjusted R^2	.28
Degrees of Freedom	711

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[1] The t-statistics are in parentheses below each regression coefficient. A t-statistic of 2.33 or greater is statistically significant at the one percent level (indicated by double asterisks) in a one-tail test; 1.65 at the five percent level (indicated by single asterisk).

[2] "All other" refers to schools and "other" program auspice.

TABLE V-8

REGRESSION ESTIMATES FOR HANDICAPPED COSTS PER HANDICAPPED CHILD SERVED AND FOOD COSTS PER CHILD SERVED

Independent Variables	Handicapped Costs Per Handicapped Child		
Percent of Children Handicapped	-13.6 (6.1)** 1/	Constant	701
		Adj. R^2	.08
Agency Without Delegates vs With Delegates	185 (3.7)**	Degrees of Freedom	760
No. of Handicapped Children	-.86 (3.3)**		

Independent Variables	USDA Reimbursed Food Costs Per Child		
Specification I			
No. of meals served per child served per day	53.1 (11.2)**	Constant	34.2
		Adj. R^2	.12
Non-SMSA vs SMSA	9.3 (2.11)*	Degrees of Freedom	890
Specification II			
No. of breakfast meals per child per day	59.0 (8.3)**	Constant	31.3
No. of lunch meals per child per day	54.0 (4.23)**	Adj. R^2	.13
No. of dinner meals per child per day	11.7 (.33)		
Non-SMSA vs SMSA	10.5 (2.37)**	Degrees of Freedom	878

1/ The t-statistics are in parentheses below each regression coefficient (indicated by double asterisks). A t-statistic of 2.33 or greater is statistically significant at the one percent level in a one-tail test; 1.65 at the five percent level (indicated by single asterisk).

- Regional teacher salary
- Non-SMSA vs SMSA* location of grantee (which corresponds to a rural/urban distinction)
- Agency organization factor which identifies a grantee as either having delegate agencies or not having them
- Percent of ACYF-paid staff with CDA's or BA's in early childhood education. (The level of statistical significance, though, is not as high as it is for the other factors listed here.)
- Total actual enrollment of the grantee
- Percent of children three years and younger (only done for total cost per child)
- Number of meals served per child per day (only done for total cost per child)

- Program auspice type tends to have little impact on cost per child measures when other factors are controlled for in the regression equation.

All three cost measures (i.e., total cost per child served, ACYF plus non-federal shares per child served, and ACYF cost per child served) are affected similarly by the above factors**.

Quantitative Impact of Independent Factors on Cost Differences Across Grantees

The above independent factors are related to the cost measures in terms of either a positive or negative impact. Also, the regression results provide a basis for assessing the magnitude of each factor's impact on a given cost measure. Findings from Tables V-4 and V-5, pertaining principally to the total cost per child served measures, include:

- Child/total staff ratio - An increase of one child served per staff member relates to a $160 decrease in total costs per child. Similarly, an increase of one child per staff member impacts upon a $101 decrease in ACYF cost per child, holding other factors constant.*** (This is based upon Specification II in Table V-5.)

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*SMSA: Standard Metropolitan Statistical Area.

**That is, whether the relationship between a cost measure and a factor is positive or negative and the level of statistical significance are generally the same for all three cost measures. The size of the coefficients for a given independent variable varies across regression equations, due to differences in the magnitude of the dependent variable (e.g., total cost per child has a much higher level than ACYF funding per child).

***I.e., variation in costs per child across grantees is narrowed by empirically removing cost differences due to other factors, via the regression formula.

- Regional teacher salary - A higher teacher salary of $100 per month in a given region relates to higher total costs per child served by approximately $77. (This is based upon Specification I in Table V-4.)
- Non-SMSA vs SMSA - Total cost per child served for grantees located in SMSA areas are approximately $137 higher relative to non-SMSA areas, holding other factors constant (based upon Table V-4). This cost difference of $137 compares to a greater cost difference of $167 between non-SMSA and SMSA grantees when other factors are not controlled for (see Table IV-5 which shows $1,999 for SMSA's vs $1,832 for non-SMSA's).
- Agency organization - Grantees with delegates incur more total costs per child served by the amount of $292 relative to grantees without delegates, holding constant the effects of the other factors specified in the regression equation. (Refer to Table V-4.)
- Percent ACYF-paid staff with degrees - An increase of 10 in the percent of ACYF-paid staff with CDA or BA degrees in early childhood education relates to a $53 increase in total cost per child served (based upon Specification II in Table V-5). This result, though, is not statistically significant for ACYF cost per child.
- CAA program auspice vs all other - When the effects of other important cost-related factors are controlled for*, cost differences between CAA's and all other grantees are not statistically significant for total cost per child, ACYF cost per child, or ACYF plus non-federal shares per child served. This result contrasts sharply with large cost differences among program auspices when other factors are not controlled for (as shown in Chapter IV).
- Percent of Head Start families receiving social services - An increase of 10 in the percent of Head Start families receiving social services relates approximately to a $10 increase in total cost per child served (Specification I, Table V-4).
- Percent of children three years and younger - When percent of children three years and younger is used instead of percent of children four years and younger, the former variable is statistically significant at the one percent level. For each ten percent increase in children three years and younger, total cost per child is increased by approximately $36 (Specification III, Table V-6).

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*I.e., variation in cost per child across grantees is narrowed by empirically removing cost differences due to other factors, via the regression formula.

- Number of meals served per child served per day - An increase of one meal served per child served per day for the operating period relates to an increase of $184 in the total cost per child (Specification IV, Table V-7).

Additional Conclusions and Implications From the Cost Regression Analysis

Aside from the quantitative results per se, the multiple regression estimates lend themselves to interpretive results as well. Additional conclusions and implications from the cost regression analysis include:

(a) Child/Staff Ratios. Child/staff ratios, either in terms of total paid staff or ACYF-paid staff, have the strongest impact on cost measures, statistically speaking, than any of the other cost-related factors. To probe into this relation further, consider three major components which affect overall child/staff ratios:

- Classroom size;
- Number of administrative staff in relation to total program enrollment; and
- Presence of support services personnel (e.g., nutrition, health services, transportation, etc.).

Smaller classroom sizes, for instance, are likely to affect lower child/staff ratios and, therefore, higher costs per child served. The higher costs in this instance may be "legitimate" in the sense that greater teacher-child contact is provided with smaller classroom sizes. Likewise, the presence of additional support service personnel will affect lower child/staff ratios and higher costs per child served. The higher costs in this instance could be linked to additional services being provided to Head Start children and their families. By way of contrast, an excess of administrative staff relative to the number of children enrolled in a given Head Start program may be more difficult to justify if programs were affected little by a reduction in such staff. A breakdown of Head Start staff by functional category (e.g., administrators, teachers, etc., as discussed in Chapter II) in the PIR would have provided a basis for quantitatively probing the relationships suggested here.

The regression analysis of child/staff ratios in Chapter III demonstrated a strong positive relationship between child/staff ratios and both classroom size and total program enrollment. The net result of this analysis (in Chapter III) and the cost analysis in this chapter imply a "trade-off" situation between lower classroom sizes (with greater teacher-child contact) and higher program costs per child. Also, the positive relationship between child/staff ratios and total program enrollment or size implies "economies of scale" in the cost operation of a Head Start program. The costs per child for administrative personnel in particular may be less when there is a greater number of children in a program. For example, the same administrative staff may be able to serve a larger size program as well as one that is smaller.

(b) Total program enrollment. Even after controlling for the effects of child/staff ratios, total program enrollment* still has a negative and statistically significant impact on total cost per child served. In other words, larger program sizes relate to lower total costs per child. This negative relationship still persists even after accounting for the lower costs attributable to the higher child/staff ratios in larger size programs.

The implication of this result is that larger size programs experience economies of scale via two effects:

- Higher child/staff ratios in larger size programs impact on lower costs per child served. (This effect is captured by the child/staff ratio variable in the regression equation.)
- Costs for non-personnel resources such as building space, utilities, and equipment are lower per child for larger size programs. I.e., non-personnel costs may be "spread over" a greater number of children in larger size programs.

(c) Regional teacher salary and non-SMSA vs SMSA location.

The regional teacher salary variable, in terms of statistical significance, has a very strong impact on the cost measures. The impact also appears to be stronger on the ACYF cost per child measure than on the total cost per child or ACYF plus non-federal shares per child measures. A likely explanation for this result is that a greater portion of ACYF cost than total or other costs is made up of personnel costs, as opposed to non-personnel costs.* Teacher salaries would relate more to the personnel cost portion of Head Start costs.

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*The total actual enrollment variable in the regression analysis is expressed in logarithmic form. The logarithmic value has the effect of reducing the magnitude of very large programs to the size of smaller programs. The logarithmic value was specified in the regression equation since it was expected that very large programs would cease to have corresponding economies of scale effects on costs per child.

Location of a grantee program in a SMSA or urban area relative to a non-SMSA or rural area relates to a higher cost per child served. This result is readily expected because of the generally higher cost-of-living in SMSA or urban areas relative to non-SMSA or rural areas. Hence, the combination of this variable and the regional salary variable in the regression equation effectively controls for geographic differences in cost-of-living and teacher salaries.

(d) Agency organization. The higher cost per child of grantees with delegates may be attributable to additional resources required by a grantee to administer its delegate agencies. Grantees without delegates do not incur such administrative costs. The cost difference may also be due partially to some erroneous "double counting" of funds for grantees and their respective delegate agencies, as discussed in Chapter IV.

(e) Program auspice. Cost differences among grantees according to program auspice appear mostly to be statistically insignificant when the effects of other factors are controlled for in the regression equation. This result contrasts sharply to the results in Chapter IV where the total cost per child and ACYF cost per child are much higher for the "other" program auspice relative to either CAA's or schools, not controlling for the simultaneous effects of other cost-related factors.

(f) Percent of program drop-outs. The expected impact of this variable is that a higher percent of reported drop-outs in a program would relate to a lower cost per child. This is because actual enrollment totals (supposedly) include drop-outs. A greater number of drop-outs who are replaced by other children is likely to render an actual enrollment total greater than the grantee's planned enrollment figure or greater than what its actual enrollment total would have been with fewer drop-outs. The net result is a lower cost per child since the denominator in the cost per child ratio is relatively greater.

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*Evidence for this is that approximately 90 percent of all Head Start staff is ACYF-paid (refer to Chapter II). Approximately 70-80 percent of total Head Start costs can be attributed to staff costs (based on estimates in DA's Final Report on Head Start Cost Analysis, May 30, 1975.)

The negative coefficients for this variable for ACYF plus non-federal shares per child and ACYF cost per child give support to this hypothesis, but the level of significance is weaker than some of the other independent variables. Also, the percent drop-out variable was not statistically significant in the total cost per child equation.*

4. Regression Analysis of Handicapped Costs Per Handicapped Child and Food Costs Per Child

Analysis of Handicapped Costs

Table V-8 presents regression estimates for handicapped funds per handicapped child and food costs per child. The top half of Table V-8 displays the results for handicapped funds per handicapped child. Findings include:

- The percent of children in a program who are handicapped has a negative relation to handicapped funds per handicapped child. An increase of one in the percent of children who are handicapped results on average in a \$13.60 decline in the amount expended per handicapped child.
- Grantees with delegates expend on average \$185 more per handicapped child than grantees without delegates.
- An increase in the number of handicapped children in a program by one relates to an 86 cent decline expended per handicapped child.

Of course, these variables in the handicapped cost equation tell us nothing about the level of services which a handicapped child is receiving in a Head Start program. The results may only mean that some programs enroll more children in relation to funds received. It does not imply any conclusions about cost differences per handicapped child across programs. What this may indicate is that some programs are simply enrolling more handicapped children for a given amount of handicapped funding.

Analysis of Food Costs

The bottom half of Table V-8 relates the amount of USDA reimbursed food costs per child to the amount of food services provided in the program. The first specification of the food cost equation relates food costs per child to the average number of meals served per child per day (inclusive of breakfast, lunch, and dinner). Findings include:

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*Also, recall the qualifications with regard to dropouts and actual enrollment totals, discussed in Chapter III.

- An increase in one meal per child served per day relates on average to a $53 increase in cost per child per program operating year.
- Meals are approximately $9 more expensive per child per operating year in SMSA's than in non-SMSA's.

Specification II of the food cost equation introduces breakfast, lunch, and dinner meals served per child served per day separately in the regression. The results in Table V-6 indicate:

- An increase in one breakfast meal per child per day relates on average to a $59 increase in cost per child per program operating year.
- The corresponding cost increase for lunch meals is $54 per child served per program operating year.
- Although the corresponding cost increase for dinner meals is about $12 per child served per operating year, it is not statistically significant.

CHAPTER VI

ANALYSIS OF HEAD START FUNDING LEVELS AND SOURCES

Chapter VI examines the sources of revenues for Head Start programs and the distribution of funding sources by program characteristics and geographic location. Chapter VI also presents descriptive statistics on funding levels from different sources and revenue matrices which reveal percents of revenues according to source. Revenue sources encompass: ACYF grant awards; ACYF handicapped funding; non-federal shares; USDA reimbursement for food; and "other" from other sources which are not part of the non-federal share. Regression analysis is also utilized to identify factors which can explain variations in funding levels across grantees.

Chapter VI is comprised of three major sections:

- Study Objectives and Methodological Approaches
- Definition of Variables and Data Qualifications
- Findings and Conclusions

The section, Findings and Conclusions, is comprised of the following subsections:

- Descriptive Statistics on Funding Levels and Percents of Revenues from Different Sources
- Revenue Percent Matrices by Program Characteristics and Geographic Location
- Regression/Correlational Analysis of Head Start Funding

A. Study Objectives and Methodological Approaches

1. Study Objectives

The overall study objective for this chapter is to identify sources of revenue for Head Start programs and their respective financial contributions to the program. Study questions include:

- Are there significant differences among program types and within a program type in the financial and in-kind resources levered by the ACYF dollar share of total program cost?
- Are there differences among individual programs and program types in the services/goods associated with these levered resources? For example, does the Head Start dollar lever comparatively more handicapped service contributions from the local community than other types of services?

- Do ACYF funding and total funding vary systematically by program characteristic?
- How does the proportion of a grantee's total Head Start staff funded by ACYF compare with its ACYF share of total funding?
- How does the non-federal share as a percent of total funding vary across program types or characteristics? Geographic location?

One broad, related issue is increasing funds or in-kind contributions from non-federal sources which result in a smaller federal share of the total funding. Within the context of the Head Start program, Congressional mandate requires a minimum 20 percent of both the ACYF grant award and the non-federal share (with some waivers allowed). An increase in the non-federal share of total funding would point towards a greater role of state, local, and private sectors in the maintenance and provision of Head Start services.

The issue of "in-kind resources" is concerned with questions of both non-federal funds and in-kind contributions such as volunteer personnel time or "donated" building space. The question of differing in-kind resources may be related to the type of organization. In large urban programs, for example, there may be considerable in-kind support in the areas of administration, equipment and supplies, while smaller programs in non-metropolitan areas generally may show major in-kind services in personnel, aides and volunteer services. Also, large public school systems may be expected to provide more support for in-kind services for administration and professional teachers.

The PIR provides dollar figures on the amounts of funds and estimates of in-kind contributions from non-federal sources (as reported in PIR Item 13A3). However, the PIR does not distinguish between non-federal funds received and in-kind contributions. It also does not provide information on the type of specific use of non-federal funds and in-kind contributions. In particular, the above study question concerning contributions of handicapped services from the local community cannot be addressed with the PIR.

2. Methodology

The empirical approaches employed in this chapter are similar to the ones used in previous chapters. Descriptive statistics such as means, medians, and standard deviations, are used to analyze both funding levels from different sources and the respective percents according to source. Tabular results, identified as "Revenue Matrices," present means or average values of these revenue percents according to program characteristic and geographic categories. Finally, regression analysis demonstrates relations between funding levels (total and ACYF) and program factors across individual grantees.

B. Definition of Variables and Data Qualifications

1. Definition of Variables

The following list of equations states the computational procedures for defining selected revenue variables analyzed in this chapter. (Reference to the PIR line items is made within the parentheses).

a. Total revenues

= ACYF grant award (PIR Item 12B) + ACYF handicapped funds (13A2) + Non-federal share (13A3) + USDA reimbursement for food costs (13B) + Revenue from other sources not declared as part of the non-federal share (13C1 + 13C2 + 13C3 + 13C4)

b. Percent* ACYF grant award of total funds

= [ACYF grant award (12B)] ÷ [Total revenues]

c. Percent handicapped funding

= [ACYF handicapped funds (13A2)] ÷ [Total revenues]

d. Percent non-federal share

= [Non-federal share (13A3)] ÷ [Total revenues]

e. Percent USDA reimbursement

= [USDA reimbursement for food costs (13B)] ÷ [Total revenues]

f. Percent other funding, exclusive of USDA reimbursement

= [Other funding (13C1 + 13C2 + 13C3 + 13C4)] ÷ [Total revenues]

g. Percent other funding, inclusive of USDA reimbursement

= [Other funding + USDA reimbursement] ÷ [Total revenues]

2. Data Qualifications

The same PIR items that were used as the basis for the cost variables are also used for the funding or revenue variables. The PIR survey questionnaire does not clearly distinguish between costs and revenue, but we assume with confidence that total costs for a Head Start grantee approximate its total revenues. That is, the program fully expends the amount of its grant award(s) and does not exceed the amount by any significant margin.

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*Percent figures are obtained by multiplying 100% times the respective ratios.

The qualifications and limitations to the PIR items relevant to costs/funding (Items 12 and 13) were discussed previously in Chapter IV.

C. Findings and Conclusions

1. Descriptive Statistics on Funding Levels and Percents of Revenue from Different Sources

Table VI-1 presents descriptive statistics on funding levels from different sources, while Table VI-2 presents regional reported totals for ACYF grant awards and handicapped funding. Findings include:

- The average size of an ACYF grant award per grantee for the 1976/1977 operating period is $383,000, compared to $375,000 for the previous operating period.
- The ACYF grant award per grantee is less than $180,000 for half of the grantees, and it is greater than $180,000 for the other half of the grantees.
- The extent of variation in the amount of the ACYF grant award from one grantee to another is very large. The smallest grant award for a grantee is approximately $17,000, and the largest amount is $12,792,000. Also, the standard deviation statistic is a very high $903,000 compared to the mean of $383,000.
- The respective means or averages per grantee for other key sources of revenue include: $569,000 for all sources of revenue; $14,500 for ACYF handicapped funds; $105,000 for the non-federal share; $32,000 for USDA reimbursement of food costs; and $34,000 for state and local revenues (inclusive of Title XX monies) and other funding (inclusive of CETA funds).
- Region IV reported higher totals for ACYF grant awards and ACYF handicapped funding than any other federal region.

Figure VI-1 illustrates the percent distribution of revenues by source. The percent figures in Figure VI-1 are based on aggregate or overall total levels of funding, rather than the mean percents calculated on the basis of individual grantees.* A comparison between the percents in Figure VI-1 and the mean percents in Table VI-3, though, show a close resemblance to each other. Figure VI-1 demonstrates that:

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*The reader is referred back to Chapter II (Section A) for a discussion on the difference in the two approaches.

TABLE VI-1

DESCRIPTIVE STATISTICS[1] AT THE GRANTEE LEVEL ON FUNDING FROM DIFFERENT REVENUE SOURCES

	No. of Valid Cases	Percent Missing of 979 Grantees	Sum[2]	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
ACYF Grant Award	941	4.8%	$360,340	$383	$180	$ 903	$17	$12,792
ACYF Award for Previous Year	912	6.8	341,836	375	176	958	0	14,806
ACYF Funds Expended	909	7.2	324,967	357	174	819	4	12,073
ACYF Handicapped Funds	872	10.9	12,602	14.5	7	25	0	327
Non-Federal Share	929	5.1	98,000	105	48	249	0	3,476
USDA Reimbursement	918	6.2	29,188	31.8	13	78	0	1,168
State Revenue Sharing	957	2.2	115	.12	0	2	0	50
Other State Revenue	949	3.1	13,534	14.3	0	164	0	4,704
Local Revenue Sharing	957	2.2	452	.47	0	5	0	111
Other Funding or Services	953	2.7	18,546	19.5	3	104	0	2,246
Total Revenues	830	15.2	$472,136	$569	$269	$1,420	$25	$18,843

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[1] All the dollar figures here are expressed in thousands of dollars.

[2] The sums are based on the valid cases for each individual variable and the number of valid cases is not the same for each variable. That is, no attempt has been made to compensate for missing grantee values or for non-responding grantee values. Any use of the sum column should be done with reservation.

TABLE VI-2

REGIONAL REPORTED TOTALS[1] FOR ACYF GRANT AWARDS AND HANDICAPPED FUNDING

	ACYF GRANT AWARDS			ACYF HANDICAPPED FUNDING		
	Reported $ Amount	No. of Valid Cases	Percent Missing of Universe[2]	Reported $ Amount	No. of Valid Cases	Percent Missing of Universe[2]
Federal Region						
1	$ 13,066.5	58	15.9%	$ 545.7	53	23.2%
2	48,207.5	64	14.7	1,003.2	63	16.0
3	33,264.5	96	8.6	961.2	87	17.1
4	97,060.6	182	15.0	3,959.8	177	17.3
5	45,231.0	147	20.5	1,403.7	138	25.4
6	41,661.9	128	9.9	1,765.6	108	23.9
7	18,918.8	55	9.8	677.0	49	19.7
8	11,027.7	46	9.8	613.3	45	11.8
9	27,862.7	53	14.5	745.0	49	21.0
10	9,885.9	47	4.1	367.2	44	10.2
IMPD[3]	14,152.9	65	19.8	560.8	59	27.2
OVERALL TOTAL	$360,339.8	941	14.0%	$12,602.5	872	20.3%

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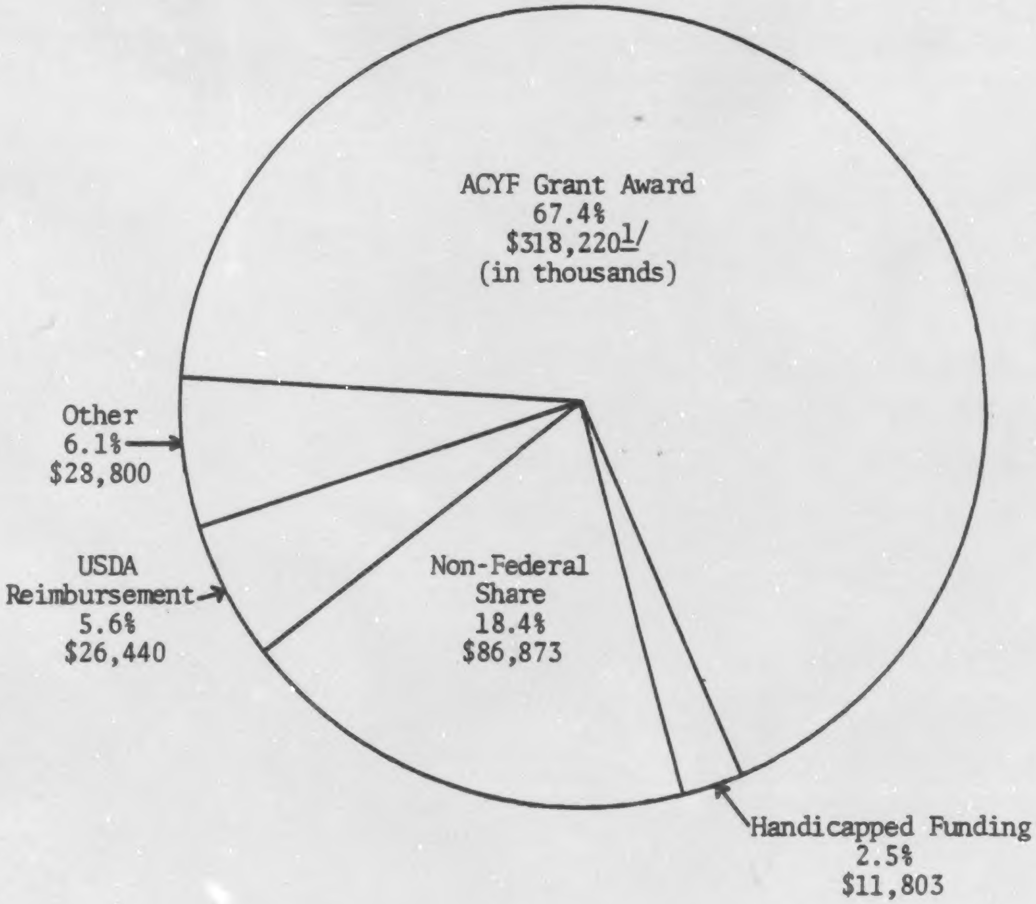
[1] Dollar figures are expressed in thousands. The reported totals are based on the valid cases for each category. That is, no attempt has been made to compensate for missing grantee values or for non-reporting grantees, thereby hindering direct comparisons across reported totals.

[2] Percent missing of universe: invalid reported cases plus non-reported cases as a percent of the universe of cases (= 1,094).

[3] IMPD: Indian and Migrant Program Division.

FIGURE VI-1

PERCENT OF TOTAL REVENUES BY SOURCE OF REVENUE



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[1] Dollar amounts according to category are estimated by multiplying the respective percents times the reported total dollar revenue of $472,136 expressed in thousands of dollars. The dollar figure is based on 830 grantees and no compensation has been made for non-responding grantees or non-reporting grantees.

TABLE VI-3

DESCRIPTIVE STATISTICS[1/] AT THE GRANTEE LEVEL ON PERCENT OF REVENUES FROM DIFFERENT SOURCES

	No. of Valid Cases	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
% ACYF Funds	830[2/]	68.0%	68.7%	9.2%	24.4%	98.5%
% Handicapped Funds	830	3.3	2.8	2.8	0	21.0
% ACYF Inc. Handicapped Funds	830	71.3	72.3	9.0	25.4	100.0
% Non-Federal Share	830	18.4	18.5	6.9	0	53.1
% USDA Reimbursement	830	5.4	5.0	3.5	0	30.9
% Others Exc. USDA Reimbursement	830	4.9	1.9	7.8	0	65.0
% Others Inc. USDA Reimbursement	830	10.3	8.3	8.2	0	70.6
% ACYF Plus Non-Federal Share	830	86.5	88.2	8.4	27.0	100.0

[1/] Note that the descriptive statistics presented were derived by using the individual grantee percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2/] Percent missing of 979 grantees for all items in Table VI-3 is 15.2 percent.

- The ACYF grant award makes up by far the greatest share of total funding for the Head Start program. The ACYF grant award with ACYF handicapped funding is almost 70 percent.

- The non-federal share is approximately 18 percent.

Table VI-3 presents descriptive statistics on percents of total revenues for a grantee by revenue source. Findings include:

- Statistical variation is much less in the revenue percents than in the levels of funding.

- ACYF funds make up by far the largest percent of a grantee's total revenue with an average percent of 68 percent for the grant award and 71 percent inclusive of ACYF handicapped funds.

- The non-federal share makes up the next largest percent of a grantee's total revenues with an average of 18.4 percent.

- USDA reimbursements account for 5.4 percent of a grantee's total revenues on average, while "other" funding accounts for 4.9 percent of the total.

ACYF funds inclusive of handicapped funds, the non-federal share, and other funding inclusive of USDA food reimbursement account for 100 percent of a grantee's revenues. The non-federal share is required by law to be 20 percent of the ACYF grant award plus the non-federal share. On average, non-federal shares of grantees represent approximately 21.4 percent of their ACYF grant award and non-federal share. A number of grantees were waved from the 20 percent requirement. (23 grantees reported a zero amount for their non-federal share.)

2. Revenue Percent Matrices by Program Characteristics and Geographic Location

Tables VI-4 and VI-5 present matrices of revenue percents by program characteristic and geographic location, respectively. The principal findings are that:

- Overall, the revenue percents deviate little by either program characteristic or regional location.

- One notable program difference is between schools, on the one hand, and CAA's and "other", on the other hand, with respect to the respective percents for ACYF funding and the non-federal share. Schools rely more on their non-federal share (23.3 percent) than either

TABLE VI-4

AVERAGE VALUES[1] OF REVENUE PERCENTS[2] BY PROGRAM CHARACTERISTICS

		ACYF FUNDING			OTHER FUNDING	
	No. of Valid Cases	Percent ACYF Grant Award	Percent Handicapped Funding	Percent Non-Federal Share	Percent USDA Reimbursement	Percent Other
Program Auspice						
Community Action Agency (CAA)	525	68.3%	3.2%	18.4%	5.7%	4.5%
School	70	64.7	3.7	23.3	3.3	5.0
Other[3]	216	68.6	3.5	17.0	5.1	5.8
Agency Organization						
Grantee Only	706	68.5	3.3	18.1	5.5	4.7
Central Office	59	64.9	3.7	20.8	5.0	5.6
Grantee with Delegates	63	66.4	3.1	19.5	4.5	6.3
No. of Delegate Agencies Administered by Grantee						
0	711	68.4	3.3	18.1	5.5	4.7
1	48	67.7	2.9	18.7	5.2	5.4
2-5	52	64.3	3.8	21.5	4.5	6.0
6-64	19	64.3	3.4	20.1	4.1	8.1
Program Size						
Less than 101 Enrollees[4]	266	67.8	3.7	18.5	4.6	5.4
101-250 Enrollees	311	68.1	3.1	18.2	5.4	5.1
251-500 Enrollees	146	68.1	3.1	18.6	6.0	4.2
Over 500 Enrollees	103	68.1	2.9	18.7	6.4	3.9
OVERALL AVERAGE	830	68.0	3.3	18.4	5.4	4.9

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[1] Note that the descriptive statistics presented were derived by using the individual grantee percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent.

[2] Percents are based on Total Revenues as defined in Section B of Chapter VI.

[3] Other includes local governments, colleges, private non-profit organizations.

[4] Enrollees served by Head Start, as opposed to planned enrollment.

TABLE VI-5

AVERAGE VALUES[1] OF REVENUE PERCENTS[2] BY GEOGRAPHIC LOCATION

		ACYF FUNDING			OTHER FUNDING	
	No. of Valid Cases	Percent ACYF Grant Award	Percent Handicapped Funding	Percent Non-Federal Share	Percent USDA Reimbursement	Percent Other
Region						
1	49	66.5%	3.3%	21.2%	4.4%	4.5%
2	58	66.7	3.5	19.1	4.0	6.6
3	84	67.8	2.6	19.5	4.4	5.7
4	167	67.2	3.9	18.6	7.2	3.1
5	129	67.6	3.5	19.5	4.1	5.4
6	104	68.0	2.3	18.7	7.7	3.3
7	49	69.5	3.8	19.7	5.1	2.0
8	45	69.0	3.7	18.6	5.1	3.6
9	47	70.2	2.1	17.3	4.3	6.1
10	44	66.4	3.1	18.0	3.7	9.0
IMPD[3]	54	71.9	4.2	10.3	5.1	8.5
SMSA[4]/Status						
SMSA	331	67.1	3.0	19.2	5.3	5.4
Non-SMSA	498	68.7	3.5	17.9	5.5	4.5
OVERALL AVERAGE	830	68.0	3.3	18.4	5.4	4.9

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[1] Note that the descriptive statistics presented were derived by using the individual grantee percents. Thus, they represent the average percent per grantee and are not necessarily the same percent that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percents.

[2] Percents are based on Total Revenues as defined in Section B of Chapter VI.

[3] IMPD: Indian and Migrant Program Division.

[4] SMSA: Standard Metropolitan Statistical Area.

CAA's (18.4 percent) or "other" (17 percent). Also, the corresponding percent for ACYF funding for schools is lower (64.7 percent for schools vs. 68.3 percent for CAA's or 68.6 percent for "other").

Hence, it appears that schools are less dependent on the ACYF dollar for their Head Start programs and that they have more of non-ACYF resources or revenue sources relative to CAA's or "other" program auspices. This result also relates to findings in the descriptive cost analysis chapter (Chapter IV) which show little difference in total costs per child between schools and CAA's but greater ACYF costs per child for CAA's relative to schools. Schools also report a lower portion of their total Head Start budget attributed to USDA reimbursement for food costs (3.3 percent for schools vs. 5.7 percent for CAA's and 5.1 percent for "other").

3. Regression/Correlational Analysis of Head Start Funding

Table VI-6 presents regression estimates for revenue funding per grantee. Differences in funding levels across individual grantees for total revenues and ACYF grant awards are explained by a few selected factors. Principal findings include:

- The overwhelming factor which explains levels of either total funding or ACYF funding is the total number of children served in a program. Table VI-6 shows extremely high levels of statistical significance for program enrollment size in both the "Total Revenues" and "ACYF Funding" (exclusive of handicapped funds) regression equations.

- Also, grantees with delegates (vs grantees without delegates), higher salary cost regions, and grantees in SMSA's tend to have higher levels of either total funding or ACYF funding.

Comparisons were also made between a grantee's ACYF revenue percent of total revenues and its ACYF-paid staff as a percent of total staff. The average ACYF percent of total revenues is 68 percent (as shown previously in Table VI-3), compared to an average percent for ACYF-paid staff of total staff of 90 percent. The higher percent for ACYF-paid staff could indicate that relatively more ACYF dollars go to financing Head Start staff rather than other Head Start resources. This conclusion is also supported by a very high correlation coefficient of .93 between total ACYF funding and total ACYF-paid staff. However, it should also be pointed out that the identification of which staff are ACYF-paid and which are not by a survey respondent may tend to be of an arbitrary accounting nature.

TABLE VI-6

REGRESSION ESTIMATES FOR REVENUE FUNDING PER GRANTEE

Independent Variable	Total Revenues (In thousands of $)	ACYF Funding[3] (In thousands of $)
Total Enrollment	.200 (129.7)** [1]	.131 (111.2)**
Agency without Delegates vs. with Delegates	9.09 (3.0)**	4.10 (1.77)*
Regional Salary	20.5 (3.0)**	11.8 (2.26)*
Non-SMSA vs. SMSA[2]	3.80 (1.75)*	2.86 (1.71)*
Constant	-31.3	-17.5
Adj. R^2	.96	.94
Degrees of Freedom	801	801

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[1] The t-statistics are in parentheses below each regression coefficient. A t-statistic of 2.33 or greater is statistically significant at the one percent level (indicated by double asterisk) in a one-tail test; 1.65 at the five percent level (indicated by a single asterisk).

[2] SMSA: Standard Metropolitan Statistical Area.

[3] Exclusive of ACYF handicapped funding.

APPENDICES

Appendix A: Descriptive Statistics on Performance Indicators

Appendix B: Description of Secondary Data Sources For Teachers' Salaries

Appendix C: Reliability of the PIR Data Base

Appendix D: Listing of States by Federal Region

Appendix E: 1976/1977 PIR Survey Questionnaire Form

Appendix F: List of Head Start PIR Variables

Appendix G: Means and Reported Totals Per PIR Item

Appendix H: Reported Totals and Means on Selected Variables, by State

APPENDIX A

DESCRIPTIVE STATISTICS ON PERFORMANCE INDICATORS

A. Background on Performance Indicators

HEW has recently developed a set of "Performance Indicators" which measure several dimensions of the Head Start program. There are eight major divisions: health; education; handicapped children; nutrition; social service; parent involvement; cultural responsiveness; and cost per child. Many of these indicators are found in the 1976/1977 PIR data base and have been presented in this report. For example, cost per child measures are analyzed in Chapters IV and V, classroom size (an education indicator) in Chapter III, medical services received by Head Start enrollees in Chapter III, number of meals served in a Head Start program in Chapter III, and the amount of parent involvement in Chapter III.

Some of the indicators, however, are not contained in the 1976/1977 PIR data base. For example, the number and percent of Head Start children who have completed all required immunizations is not in the 1976/1977 PIR data base but is included in later PIR surveys. The Child Development Associate (CDA) Checklist is used as a measure of the quality of the educational component. Other performance indicators, such as parent impacts/satisfaction, reading skills development, and development of self-esteem, require instruments other than the PIR survey to obtain the appropriate measures.

B. Methodology

Appendix A presents several measures of performance indicators contained in the PIR data base. Appendix A presents summary statistics and means by region, program auspice, and part-day and full-day operations for the performance indicators found in the 1976/1977 PIR data base.

The descriptive statistics presented in the tables in Appendix A were derived by using the individual grantee calculated percents or ratios. Thus, they represent the average percent or ratio per grantee and are not necessarily the same percent or ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent or ratio based on totals.

Appendix A contains the following tables:

- Table A-1 presents the performance indicators in eight subsections. The chapter numbers enclosed in parentheses refer to the chapter in the text in which a subsection topic area is addressed.
  - Health (Chapter III)
  - Education (Chapters II and III)

- Handicapped Children (Chapter II)
- Nutrition (Chapter III)
- Social Services (Chapter III)
- Parent Involvement (Chapter III)
- Cultural Responsiveness (Chapter II)
- Cost Per Child (Chapters IV and V)

- Tables A-2 To A-5 present means and number of valid cases by region for each of the performance indicators listed in Table A-1.
- Table A-6 presents means and number of valid cases by program auspice for selected performance indicators.
- Table A-7 presents means and number of valid cases by part-day and full-day operations for selected performance indicators.

C. Findings

Many of the findings in the tables in Appendix A have already been discussed in the main text of the Final Report. However, a few selected findings are repeated or added here.

Summary Statistics

Table A-1 presents the summary statistics on Head Start performance indicators from the 1976/1977 PIR data base. Some of the findings are as follows:

- On the average, grantees give medical screening to almost 90 percent of their enrollees and give dental screening to almost 85 percent.
- On the average, each member of the teaching staff has a child load of 10.4 children based on actual enrollment.
- The average number of breakfasts served per day per child served is not quite a half of a breakfast while the average number of lunches served per day per child is almost three-fourths of a lunch.
- The ratio of the number of families to enrollees served provided direct social services is almost .70.
- The ratio of percent minority staff to percent minority children is about .87.
- On the average, the total program cost per grantee per year per child is $1,900.

Descriptive Statistics by Region

Tables A-2 to A-5 present descriptive statistics by region for each of the performance indicators listed in Table A-1. A few selected findings follow:

- The percent of children who are medically screened varies very little across regions from a low of 87 percent in Region VII to a high of 91.8 percent in Region I.
- Child/teacher staff ratios are highest in Region VI and lowest in Regions I and II.
- Classroom sizes vary from a low of 19 in Region III to a high of 25 in Region IX.
- Meals served per child vary from a low of .93 in Region VIII to a high of 1.44 in Region IV.
- In all three of the performance indicators for social services, IMPD has the lowest ratios.
- Ratio of percent minority staff to percent minority children is lowest for Region X and highest for Region IV.
- The percent of minority children is especially high for IMPD and also relatively high for Regions VI, IX, and IV.
- Total cost per child served varies from a low of $1,482 in Region VI to a high of $2,651 in Region II.

Descriptive Statistics by Program Auspice

Table A-6 looks at selected performance indicators by program auspice. Some of the findings are as follows:

- The highest proportion of ACYF paid staff with early childhood education degrees or credentials is for schools.
- The highest proportion of minority children fall into the "other" category for program auspice.
- Classroom sizes vary little across program auspice.
- Child/staff ratios are higher for schools and lower for "other."
- Proportion of families provided social services is highest in CAA's. In general, though, supportive services vary little across program auspice.

Part-day Vs. Full-day Program Operation Differences

Table A-7 presents the statistical means on selected performance indicators for part-day and full-day operations separately. In previous discussions, the unit of analysis has been the grantee. Now the unit of analysis is part-day and full-day operations within a grantee, where some grantees have both types. There were 262 full-day program operations and 858 part-day program operations. (However, because of missing values, the number of valid cases per item is less.) Some of the findings are as follows:

- Both part-day and full-day operations have the same percent of ACYF-paid staff with degrees.
- The percent of minority children and the ratio of percent minority staff to percent minority children are both higher in full-day operations.
- The number of children served per classroom is one child higher for part-day vs. full-day.
- Total part-day cost per child served is $1,869, compared to $2,385 for full-day program operations.

Footnotes for Appendix A Tables

[1] The descriptive statistics presented in these tables were derived by using the individual grantee calculated percents or ratios. Thus, they represent the average percent or ratio per grantee and are not necessarily the same percent or ratio that would be obtained by first summing across grantees to obtain the appropriate numerator and denominator for calculating the percent or ratio.

[2] Minority consists of "Black," "Hispanic," "Asian or Pacific Islander," and "American Indian or Alaskan Native" per the PIR survey form.

[3] IMPD: Indian and Migrant Program Division.

[4] Separation of part-day and full-day operations within grantees implies that the unit of analysis is either the part-day or full-day operation within the grantee. Grantees may have part-day, full-day, or both types of operations. Thus, instead of the 979 possible cases when the unit of analysis is the grantee, there are now 1,120 possible cases. However, because of missing values, the number of valid cases for a particular variable for part-day and full-day operations do not sum to the total number of possible cases.

[5] "Other" program auspice includes local governments, colleges, private non-profit organizations number of possible cases.

[6] Degrees consist of Child Development Associate (CDA) Credentials and Bachelor or Advanced Degree in Early Childhood Education.

TABLE A-1
OVERALL SUMMARY STATISTICS[1] ON HEAD START PERFORMANCE INDICATORS

Indicators	No. of Valid Cases	Percent Missing of 979 Grantees	Mean	Median	Standard Deviation	Minimum Value	Maximum Value
Health							
Percent of children served medically screened	875	10.6%	89.5%	93.9%	13.3%	0.56%	100%
Percent of children served medically treated	924	5.6	26.2	19.3	23.8	0.0	100
Percent of children served needing medical treatment	927	5.3	23.8	18.2	21.1	0.0	100
Percent of children served dentally screened	895	8.6	84.7	90.0	17.8	0.0	100
Percent of children served dentally treated	934	4.6	42.2	38.3	25.6	0.0	100
Percent of children served needing dental treatment	930	5.0	43.7	40.5	24.8	0.0	100
Percent of children served who have reimbursed services:							
- medical	911	6.9	27.2	21.1	24.8	0.0	100
- dental	904	7.7	22.6	18.0	21.6	0.0	98.3
Education							
Child/teaching staff ratio based on actual enrollment	902	7.9	10.4	10.0	3.64	1.90	27.0
Number of children served per classroom	954	2.6	22.5	20.9	7.11	6.0	57.5
Percent of ACYF-paid staff with degrees	895	8.6	11.2	7.7	12.0	0.0	80.0
Handicapped							
Percent of enrolled children who are handicapped	908	7.3	14.7	12.6	7.8	0.0	60.0
Nutrition							
Average number of meals served per day per child served by Head Start:							
breakfast	947	3.3	.443	.487	.334	0.0	1.00
lunch	938	4.2	.708	.729	.187	0.0	1.00
dinner	957	2.2	.005	.000	.060	0.0	.909
snacks	926	5.4	.519	.608	.327	0.0	1.00
breakfast, lunch, and/or dinner	946	3.4	1.17	1.18	.457	0.0	2.78
Social Services							
Ratio of number of families to enrollees served provided:							
- direct social services	951	2.9	.685	.814	.475	.14	5.82
- referrals	927	5.3	.300	.249	.231	0.0	1.0
- referrals and follow-ups	925	5.5	.249	.187	.215	0.0	1.0
Parent Involvement							
Ratio of number of parents to enrollees served:							
- attending policy meetings	923	5.7	.142	.091	.150	0.0	1.0
- attending educational activities	910	7.0	.253	.208	.203	0.0	1.0
- serving as volunteers	821	16.1	.674	.625	.385	0.0	1.0
- serving as paid staff	931	4.9	.056	.050	.037	0.0	.240
Cultural Responsiveness							
Percent of ACYF-paid staff of minority status	955	2.5	45.0	46.2	34.0	0.0	100
Percent of children of minority status	964	1.6	50.5	53.4	35.0	0.0	100
Ratio of percent minority staff to percent minority children	940	4.0	.874	.886	.74	0.0	7.43
Cost Per Child Served							
Total program cost	826	15.6	$1,900	$1,783	$ 637	$583	$6,324
Total part-day cost	772	9.9	$1,869	$1,754	623	$583	$5,815
Total full-day cost	195	25.6	$2,385	$2,106	$1,127	$703	$6,831

[1] See page A-5 for data qualifications and definitions.

TABLE A-2

SUMMARY STATISTICS[1] ON HEAD START PERFORMANCE INDICATORS: REGIONAL STATISTICS ON HEALTH PERFORMANCE INDICATORS

FEDERAL REGION	Percent of Childred Served Medically Screening		Percent of Children Served Medically Treated		Percent of Children Needing Medical Treatment		Percent of Children Served Dentally Screened		Percent of Children Served Dentally Treated		Percent of Children Served Needing Dental Treatment		Percent of Children Served Who Have Received Reimbursed Services -			
													Medical		Dental	
	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases
1	91.8	52	31.2	58	27.4	58	85.8	55	41.4	56	42.5	57	46.3	57	41.8	56
2	89.5	63	28.6	68	27.3	66	82.5	67	27.6	68	33.4	66	40.6	65	32.8	65
3	90.2	86	31.8	95	29.6	96	84.7	87	44.1	95	45.4	92	26.9	94	24.0	94
4	91.4	166	28.1	178	25.2	182	88.3	169	46.4	179	46.6	180	20.9	178	16.3	175
5	89.2	144	25.0	146	22.0	146	84.3	149	36.2	150	38.0	150	36.9	146	29.3	146
6	86.9	122	21.0	125	19.7	126	82.0	122	38.3	129	42.1	128	14.8	123	9.6	119
7	87.0	51	22.8	53	21.2	52	85.7	50	41.6	53	41.4	53	29.3	52	27.5	51
8	91.4	40	24.1	43	23.3	45	89.3	41	49.4	44	45.4	44	23.0	43	21.9	43
9	87.1	47	24.4	51	22.4	50	77.3	47	42.0	49	40.8	49	24.8	49	18.2	49
10	88.9	45	21.3	47	21.9	47	83.3	45	55.8	46	56.3	46	43.0	45	38.1	47
IMPD	90.6	59	28.6	60	20.4	59	85.2	63	51.6	65	54.8	65	7.0	59	6.6	59
Overall Average	89.5	875	26.2	924	23.8	927	84.7	895	42.2	934	43.7	930	27.2	911	22.6	904

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[1] See page A-5 for data qualifications and definitions.

TABLE A-3

SUMMARY STATISTICS[1/] ON HEAD START PERFORMANCE INDICATORS: REGIONAL STATISTICS ON EDUCATION, HANDICAPPED ENROLLMENT AND NUTRITION PERFORMANCE INDICATORS

FEDERAL REGION	EDUCATION						HANDICAPPED		NUTRITION									
	Child/Teaching Staff Ratio Based on Actual Enrollment		Number of Children per Classroom-Actual		Percent of ACYF-Paid Staff with Degrees		Percent of Enrolled Children Who are Handicapped		Average Number of Meals Served per Day per Child Served by Head Start:									
									Breakfast		Lunch		Dinner		Snack		Breakfast, Lunch, and/or Dinner	
	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases
1	8.540	52	20.9	59	16.6	52	14.3	59	.513	59	.729	58	.000	60	.403	58	1.220	57
2	7.860	63	23.7	68	14.6	63	15.8	68	.407	68	.706	68	.009	69	.578	65	1.127	68
3	9.091	90	19.3	98	10.0	91	14.8	95	.409	96	.725	96	.000	97	.576	95	1.128	95
4	11.223	173	22.2	181	08.9	173	16.0	170	.682	182	.765	181	.014	182	.613	179	1.433	176
5	11.047	149	24.0	153	12.3	145	13.9	144	.286	153	.656	150	.004	154	.476	149	.945	149
6	12.772	122	23.3	130	09.4	119	14.9	122	.506	126	.712	125	.008	128	.564	122	1.193	120
7	9.394	51	22.8	55	05.5	51	15.2	52	.367	54	.706	53	.000	55	.412	52	1.095	54
8	9.778	42	22.6	46	15.9	45	14.5	46	.214	47	.712	47	.000	47	.529	47	.925	47
9	11.401	51	25.0	53	13.3	51	11.9	51	.281	51	.666	49	.001	52	.479	50	.970	51
10	9.499	46	24.4	47	10.9	45	16.7	46	.377	47	.595	47	.000	48	.242	47	.972	47
IMPD	8.944	63	20.2	64	11.8	60	11.4	55	.451	64	.728	64	.000	65	.547	62	1.152	62
Overall Average	10.393	902	22.5	954	11.2	895	14.7	908	.443	947	.708	938	.005	957	.519	926	1.144	926

[1/] See page A-5 for data qualifications and definitions.

TABLE A-4

SUMMARY STATISTICS[1] ON HEAD START PERFORMANCE INDICATORS: REGIONAL STATISTICS ON SOCIAL SERVICES AND PARENT INVOLVEMENT PERFORMANCE INDICATORS

FEDERAL REGION	SOCIAL SERVICES						PARENT INVOLVEMENT							
	Ratio Number of Families to Enrollees Served Provided:						Ratio of Number of Parents to Enrollees Served:							
	Direct Social Services		Referrals		Referrals w/ Follow-ups		Attending Policy Meetings		Attending Educational Activities		Serving as Volunteers		Serving as Paid Staff	
	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases
1	.819	58	.333	59	.305	59	.156	59	.276	59	.582	54	.071	57
2	.821	68	.403	66	.339	67	.116	68	.281	67	.689	58	.065	65
3	.713	98	.325	96	.268	96	.149	89	.270	90	.718	80	.062	94
4	.654	182	.272	180	.225	180	.106	175	.230	174	.621	158	.045	177
5	.614	153	.262	151	.222	151	.160	151	.256	146	.735	135	.058	147
6	.712	130	.260	124	.184	121	.152	126	.283	125	.601	115	.036	126
7	.788	54	.362	54	.316	53	.132	52	.242	51	.749	49	.058	55
8	.668	47	.307	45	.264	45	.116	47	.214	45	.805	38	.071	46
9	.687	52	.337	49	.273	51	.198	49	.274	47	.728	44	.056	52
10	.715	47	.407	43	.329	42	.110	48	.229	48	.820	41	.064	47
IMPD	.466	62	.209	60	.177	60	.196	59	.215	58	.521	49	.073	65
Overall Average	.684	951	.300	927	.248	925	.142	923	.253	910	.674	821	.056	931

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[1] See page A-5 for data qualifications and definitions.

TABLE A-5

SUMMARY STATISTICS[1] ON HEAD START PERFORMANCE INDICATORS: REGIONAL STATISTICS ON CULTURAL RESPONSIVENESS AND COST PER CHILD

FEDERAL REGION	CULTURAL RESPONSIVENESS						COST					
	Percent of ACYF-Paid Staff of Minority Status		Percent of Children of Minority Status		Ratio of Percent Minority Staff to Percent of Minority Children		Total Cost Per Child		Part-Day Cost Per Child		Full-Day Cost Per Child	
	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases	Mean	No. of Valid Cases
1	16.1%	59	20.3%	58	.640	56	$2,079	48	$2,168	52	$3,493	5
2	42.4	66	46.7	68	.773	65	2,651	58	2,470	47	3,222	23
3	37.3	98	44.3	99	.843	95	2,234	83	2,078	73	3,172	31
4	59.9	184	64.3	182	1.004	180	1,825	166	1,807	146	2,015	38
5	27.1	154	30.5	158	.878	152	1,634	128	1,684	136	1,968	12
6	63.5	129	70.6	130	.979	127	1,482	104	1,437	85	1,681	51
7	19.7	55	23.9	56	.887	55	1,775	49	1,746	55	3,040	6
8	34.7	46	42.4	47	.730	46	1,721	45	1,716	44	2,325	5
9	63.3	53	69.1	53	.933	53	2,099	47	2,028	48	3,414	5
10	19.5	46	27.3	48	.605	46	2,064	44	2,111	45	2,934	3
IMPD	81.1	65	92.0	65	.886	65	2,046	54	2,039	41	2,094	16
Overall Average	45.0%	955	50.6%	964	.874	940	$1,900	826	$1,869	772	$2,385	195

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[1] See page A-5 for data qualifications and definitions.

TABLE A-6

SUMMARY STATISTICS1/ ON SELECTED HEAD START PERFORMANCE INDICATORS BY PROGRAM AUSPICE

SELECTED PERFORMANCE INDICATORS	PROGRAM AUSPICE						Total	
	Community Action Agency (CAA)		School		Other1/			
	Mean2/	No. of Valid Cases	Mean2/	No. of Valid Cases	Mean2/	No. of Valid Cases	Mean2/	No. of Valid Cases
Percent of ACYF-paid staff with degrees	9.7%	565	19.0%	83	12.1%	227	11.2%	895
Ratio of percent minority staff to percent minority children	.875	593	.821	87	.892	237	.874	940
Percent of children in their first year of Head Start	77.4	607	84.6	88	75.7	238	77.4	957
Percent of children of minority status	47.3	608	44.4	90	60.4	241	48.1	964
Percent of children who dropped out	15.6	591	12.4	87	17.4	231	15.8	933
Number of children served per classroom	22.7	603	21.9	88	22.3	239	22.5	954
Child/teaching staff ratio based on actual enrollment	10.433	572	12.189	85	9.598	224	10.393	902
Average number of meals served per day per child served by Head Start	1.15	583	1.21	88	1.08	231	1.17	945
Ratio of number of parents to enrollees served provided direct social services	.718	601	.673	89	.606	236	.685	951

TABLE A-7

SUMMARY STATISTICS[1] ON SELECTED HEAD START PERFORMANCE INDICATORS BY PART-DAY AND FULL-DAY PROGRAM OPERATIONS

SELECTED PERFORMANCE INDICATOR	PART-DAY		FULL-DAY	
	Mean[1]	No. of Valid Cases	Mean[1]	No. of Valid Cases
Percent of ACYF-Paid Staff with Degrees	11.2	809	11.2	236
Ratio of Percent Minority Staff to Minority Children	.837	844	.980	260
Percent of Children in Their First Year of Head Start	79.5	848	65.0	251
Percent of Children of Minority Status	47.2	847	66.0	260
Percent of Children Who Dropped Out	15.4	828	19.2	247
Number of Children Served per Classroom	23.0	839	22.0	256
Child/Teaching Staff Ratio Based on Actual Enrollment	10.766	815	9.476	256
Average Number of Meals Served per Day per Child Served by Head Start	1.113	828	1.307	246

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[1] See page A-5 for data qualifications and definitions.

APPENDIX B

DESCRIPTION OF SECONDARY DATA SOURCES FOR TEACHERS' SALARIES

Five alternative sources on teachers' salaries were investigated for their potential usefulness to this study. Only one source (Bureau of the Census, Local Government Employment in Selected Metropolitan Areas and Large Counties: 1976) stands out clearly in terms of both accessibility and level of geographic detail. A discussion of each potential source and its limitation follows.

A. Administration on Children, Youth, and Families, Regional Offices, Grant Application Forms of Head Start Programs.

Salary data for several different categories of personnel had been required from Head Start grantees on their grant application forms. However, the last Head Start program year for which such information was required was 1975. Also, these data pertained to individuals within a program, rather than to market salaries. This limits the applicability of this source for salary data, especially for future cost analysis. Its accessibility is limited in that the 1975 grantee application forms are located in the various regions.

B. National Center for Education Statistics, Statistics of Public Elementary and Secondary Day Schools: Fall, 1976.

This source contains average annual salaries for classroom teachers in public elementary and secondary day schools for 1976-1977, by state and for 20 large cities. Unfortunately, this source does not provide very detailed data on a geographic basis (e.g., by county or school district). Even at the state level of aggregation, though, the average salary will vary widely from a low of $9,397 for Mississippi to a high of $21,060 for Alaska, according to data from this source.

C. National Education Association, Estimates of School Statistics: 1976-1977.

Similar to the preceeding source, this source provides average annual salaries of elementary and secondary school teachers by state for 1976-1977. In addition, elementary school teacher salaries are reported separately from secondary school teacher salaries. Salaries of elementary school teachers are, perhaps, more appropriate as secondary data for this study than the combined salary for both elementary and secondary teachers. On the other hand, there appears to be little difference between the two categories of teachers in terms of either the level of salaries or variation in salaries across states.

D. National Center for Education Statistics - unpublished Elementary and Secondary General Information Survey (ELSEGIS) data, 1976-1977.

ELSEGIS data, available on computer tape, contains expenditure data on instructional staff for individual school districts. Information on numbers of staff, which would be needed to calculate salary figures is available for individual school districts from the Equal Employment Opportunity Commission (EEOC). Unfortunately, the ELSEGIS and the EEOC sources are based upon samples of school districts which do not necessarily match, except on a random basis and for oversampling large school districts.

E. Bureau of the Census, Local Government Employment in Selected Metropolitan Areas and Large Counties: 1976.

This source presents monthly payroll expenditures separately for teachers and other workers in education who are employed for the month of October by local governments within a given county. This source also reports the number of employees in each respective category so that one can calculate average monthly salaries by dividing the monthly payroll figure by the respective number of staff. These data are available for counties which contain or are part of large SMSA's and also for large counties (in terms of population size) outside major SMSA areas. The total number of counties thus covered is almost 390. In general, this data source is highly advantageous for integration into the PIR data base given:

- Its ready accessibility in published form and availability on an annual basis.
- Its level of geographic detail on a county, rather than statewide basis.

APPENDIX C

RELIABILITY OF THE PIR DATA BASE

Appendix C presents Development Associates' assessment of the reliability of the 1976-77 PIR data base used to report analysis findings in this project. This assessment is based upon extensive manual and computer editing of PIR data and individual review of the PIR survey forms completed by the respondents. A total of approximately 1,500 PIR survey respondents were entered into the PIR data base, of which 979 were grantees and 520 delegate agencies. The approximate total of 1,500 respondents compares against an estimated universe size of 1,700 respondents (or 1,100 grantees).

Development Associates' assessment of the 1976-77 PIR data is limited in that DA did not originally collect the PIR data, exercise quality control over the collection of the data, or participate initially in the editing of the PIR data. The comments here are based upon additional errors, discrepancies, and questionable entries which have been subsequently uncovered. However, our assessment is not necessarily restricted to information relating only to manual and computer specifications. Additional criteria for assessment include:

- Consistency in questionnaire items; complexity of PIR questions.
- Analytical appropriateness of certain questions.
- Lack of needed instructions for respondents.
- Comments by respondents.
- Judgements as to how responses could vary inconsistently and still fall within the range of "tolerance limits".

Several assessments of individual PIR items are presented throughout the Final Report under the subsections of "Definition of Variables and Data Qualifications." Appendix C supplements these assessments with a more detailed account of the problematical aspects of the PIR data. Two areas of assessment are addressed here:

(1) Respondent errors, inconsistencies, missing entries, or otherwise questionable entries.

(2) Non-respondents.

Respondent Reliability

Original PIR survey forms had numerous and extensive problems. Manual and computer editing resolved many of these problems or at least made the data more amenable for analysis. Our overall assessment of the reliability of the data is that most items in the PIR are relatively free of systematic respondent errors although the random component error may be larger. Identified errors which could not be replaced with correct entries were simply coded as missing. For instance, certain "tolerance limits" were set for some of the PIR items. If a respondent entry fell outside the acceptable range, we examined entries in related PIR items or looked for other clues to explain the questionable entry. If no explanation could be found, then the questionable entry was coded as missing. Consistency checks were also used to identify questionable entries. For instance, Item 12B should not have included non-federal share funding (13A3). A consistency check for this was to determine if Item 12B were equal to the sum of 13A1 and 13A3, plus or minus 5 percent of 13A1 for a reasonable margin of difference. If 12B equaled the sum of federal and non-federal shares, then 13A3 was subtracted from 12B as a correction for 12B.

Our review and assessment indicate that certain items in the PIR have a greater frequency of questionable entries than other items. These items are:

- Days of classroom operation (PIR Items 14C, 14E);
- Number of hours of classroom operation (14D, 14F);
- Average daily attendance (16A4); and
- Enrollment by program mode (16F).

Problems with these entries are due primarily to lack of precise instructions for the respondents to follow. For instance, enrollment entries vary within a given PIR when these entires should be the same. (I.e., Items (16B1 + 16B2), 16C3, 16D6, 16E5, and (16F1 + 16F2 + 16F3 + 16F4 + 16F5) should all have the same entry and equal actual total enrollment). Enrollment entries vary in the PIR forms according to whether or not the respondent used planned vs. actual enrollment, whether or not the enrollment figure included number of drop-outs or not, and according to a variety of other causes. Inconsistent or non-matching enrollment totals occur in approximately 400 PIR forms. However, for almost all PIR forms, we can identify at least two matching enrollment totals which should render a fairly reliable estimate of total enrollment for a given Head Start program.

The starting point for our review of the PIR data was the development of manual and computer edit guidelines. These specifications were categorized according to the following area:

A. Tolerance limits or ranges.

B. Summation checks.

C. Consistency checks.

D. Computational checks.

The several types of errors included:

1. The tolerance limits for days of operation per year (Item 14E) were generally set between 50 or 70 and 260 days per year. Ranges of hours of operation per day were set at between 4 and 15 hours and between 2 and 12 hours for full-day and part-day programs, respectively. 113 entries were found to fall outside these ranges.

2. Number of total ACYF - paid staff by ethnics composition (Item 8F) were found to exceed numbers of ACYF - paid staff in other entries (9A, 9B, 9C, 10B) in approximately 15 cases.

3. Number of centers (14A) exceeded the number of classrooms (14B) within a program in 15 cases.

4. Enrollment entries by part-day program mode (16F) were inconsistent with entries for days of operation by part-day program mode in 215 cases.

5. Number of children who received some type of health screening (Item 15) was less than the respective number who actually received treatment in approximately 50 cases.

6. Number of children handicapped exceeded enrollment totals by poverty category within Item 16B in approximately 40 cases.

7. Number of Head Start parents participating in parent involvement activities (19) exceeded more than double the number of children enrolled in about 25 cases.

8. The ACYF grant award included the non-Federal share in approximately 85 cases.

9. In total there were about 475 summation errors and non-matching actual enrollment totals.

10. ACYF funding per child or costs per child incurred against ACYF funding were either less than $400 per child or in excess of $3,500 per child in approximately 40 cases.

11. Handicapped costs per handicapped child exceeded $3,500 in 10 cases.

12. "Other funding" (13C1 + 13C2 + 13C3 + 13C4) per child exceeded $3,000 in about 10 cases.

13. Classroom sizes exceeded 60 children per classroom in approximately 35 cases. These cases were typically double session programs where one classroom held two classes of children per day. In these cases, entries were replaced by one-half their figure of 60 or more.

In determining the quality and reliability of possible ratios and estimates, we rated the individual data items for the costs and funding level data, the enrollment data, and the center information data (Table C-1). In general, we feel that the costs and funding level data have fair reliability. The total enrollment data have fair reliability although the subitems in enrollment (broken down by number of handicapped children, race, age of children, etc.) may have somewhat less reliability. The planned enrollment entries are likely very good data. Therefore, the dollars per child ratio with perhaps the best overall reliability is the ACYF funding level for the present operating period (Item 12B) divided by total planned enrollment (Item 16A3). The best that can be said is that this ratio will have fair reliability. In general, we feel that a ratio or estimate should be rated no higher than the lowest reliability rating of the data items included in the ratio or estimate.

For the actual enrollments data we feel that the best of it can be considered as fair reliability. Among the forms we personally reviewed, a high number evidently used the planned enrollment total instead of the actual enrollment figure. Respondents appeared to be inconsistent as to whether or not they included number of dropouts in their actual enrollment totals. Also, a standard definition for "drop-out" is lacking in the PIR survey form.

Data entries on staffing appeared on the whole to be good, and therefore are not rated individually. However, they have a number of analytical limitations which Chapter VI on the study recommendations makes references to.

Non-Respondents

Approximately 200 potential respondents out of a universe of 1,700 respondents were identified as non-respondents. (It should be noted that approximately half of the 90 "central office" grantee respondents did not fill out staffing and funding information on the PIR form per instructions, but only completed the blue "Grantee Information Form". Approximately 25 of the non-respondents were respondents whose PIR survey questionnaire forms had so many gross errors or questionable entries that they were dropped from the list of respondents.

We have briefly examined the question of possible non-response bias in the analytical results of this project. Tables C-2 and C-3 show the distributions of respondents and non-respondents by region and program auspice respectively. Little response bias appears to be the case for either region or program auspice in that the distributions for respondents and the universe coincide closely to each other. IMPD, though, has a higher degree of underrepresentation than other categories. Table C-4 shows the distributions of grantees responding and non-responding for several different categories of planned enrollment categories. The respective percent distributions for responding grantees and all grantees are remarkably almost identical to each other, thereby indicating virtually no non-response bias in the PIR data file for program size.

TABLE C-1

DATA ITEM	OVERALL RELIABILITY ASSESSMENT	COMMENTS AND PARTICULAR PROBLEMS
I. Funding and Cost Data		
1. Amount of ACYF Award(s) for Current Operating Period (Item 12.B).	Fair	Problems with 12.B and 12.C: (1) inclusion of non-federal share; (2) inclusion of handicapped funds; (3) double entries (e.g., one entry is for "extension" funds; (4) includes only amount received to time of report. This item was not to include handicapped services award, but was to include the non-federal share. Most cases have excluded both. Some grantees/delegate agencies included one or the other. When possible, these dollar values were adjusted during the manual edit.
2. Amount of ACYF Award(s) for Previous Operating Period (Item 12.C)	Fair	Similar to above but no correction could be made if it was suspected that funding for handicapped services and/or the non-federal share was included in item (item coded as bad in these cases).
3. Costs Incurred Against Revenue from Federal Share (Item 13.A.1)	Fair	Fairly frequently the amount given for this item was identical to the amount given in 12.B. The grantees/delegate agencies were asked to estimate costs for portion of operating period not completed. Therefore, the utility is affected by the criteria the grantees/delegate agencies used (which will vary for each).
4. Costs Incurred Against Revenue from Account 26 - Handicapped (Item 13.A.2).	Fair	This item is subject to a variety of problems. An individual delegate agency (or in some cases a grantee) may not specify a dollar amount because the grantee (or a consortium of grantees) may handle handicapped services. The amount of the Account 26 grant award is not given so a direct consistency check cannot be performed. Only checks feasible are in terms of the number of handicapped children enrolled. In a few cases the costs are not broken down for part day and full day.

DATA ITEM	OVERALL RELIABILITY ASSESSMENT	COMMENTS AND PARTICULAR PROBLEMS
I. Funding and Cost Data (Cont'd.)		
5. Costs Incurred Against Revenues from Non-Federal Share (Item 13.A.3)	Fair - This figure is an estimated total for some cases.	This item has the same problems as the federal share item. It is estimated and may have been taken directly from grant application. Only obviously erroneous entries are coded as missing data.
6. Costs Incurred for Food and/or Food Services which have been or will be paid for by USDA (Item 13.B.)	Fair	The figure given reflects the amount which the grantee/delegate agency hopes to be paid for by USDA. USDA may not honor the full amount specified. Also, some grantees/delegate agencies have food/food services on a contracted basis or supplied by other sources. The extent of USDA involvement is not known for these service modes.
7. Costs Incurred and Paid for from other sources and not declared as part of non-federal Share a. State Revenue Sharing (Item 16.C.1) b. State-Other (Item 16.C.2) c. Local Revenue Sharing (item 16.C.3) d. Other Funding or Services (Item 16.C.4)	Fair	No consistency checks or tolerance limit statements can be made on these data elements. Data is accepted as entered unless other cost items show severe errors or problems. In these cases all cost data are coded as missing. This situation has arisen in only a few cases.
8. Total Cost of Food Purchases a. Food Purchases Paid Out of OCD Funds and Not Reimbursed by USDA (item 17.B.1) b. Food Purchases Reimbursed, or to be reimbursed by USDA (Item 17.B.2) c. Total Food Purchases (Item 17.B.T)	Fair	In a few cases, food costs are not broken down by part day or full day. In other cases, the food services are contracted or are provided by grantee or other sources. The data are generally accepted as entered.

DATA ITEM	OVERALL RELIABILITY ASSESSMENT	COMMENTS AND PARTICULAR PROBLEMS
II. Enrollment Data		
1. Planned Enrollment		
A. Number of Children who are Funded by OCD (Item 16.A.1)	Very good	Item is compared with other enrollment entries. We feel that it is the one enrollment entry with least error.
B. Number of Children Who are Funded by Other Sources (Item 16.A.2)	Good	No direct check can be made but entries seem reasonable. This item will be checked against the "other sources" cost items in the computer edit
C. Total Planned Enrollment (Item 16.A.3)	Good	Total of above items.
2. Average Daily Attendance (Item 16.A.4)	Very Poor	A number of problems affect this data element. The required computations may have been too complex for some program people to understand. That is, the entry must be as a percent of the total planned enrollment and must exclude children served in the Home Base mode. No specific checks were made as part of the manual edit but it was occasionally left blank by respondents or not given as a percent of total enrollment. Also, note that in many instances ASI had made corrections.
3. Enrollment Requirement (Actual)	Fair	In several cases these items are apparently based on planned enrollment rather than on the actual enrollment as they should be. In addition, the breakdown of the enrollment for some cases reflect exactly the federal regulations. That is, exactly 10 percent are above the poverty level, and/or exactly 10 percent are handicapped. Therefore, in some cases these data reflect the desired breakdown of the planned enrollment rather than the actual breakdown of the children enrolled.
A. 1. Number of Children Above Poverty Level (Item 16.B.1)		
2. Number of Children Above Poverty Level and are Handicapped (Item 16.B.1.a)		
B. 1. Number of Children at or Below Poverty Level (Item 16.B.2)		
2. Number of Children at or Below Poverty Level and are Handicapped (Item 16.B.2.a)		

DATA ITEM	OVERALL RELIABILITY ASSESSMENT	COMMENTS AND PARTICULAR PROBLEMS
4. Length of Enrollment*		In most cases this figure appears to be the best estimate of total actual enrollment. However, in some cases the total in 16.C.3 is equal to planned enrollment (16.A.1 or 16.A.3) or is equal to total actual enrollment less the number of children who dropped out. Using the total figure (Item 16.C.3) will result in at least 10 percent underenumeration and possibly up to a 20-25 percent underenumeration. The individual subitems generally equal the total entry.
A. Number of Children in Their First Year of Head Start (Item 16.C.1)	Fair	
B. Number of Children in Their Second and Subsequent Years (Item 16.C.2)	Fair	
C. Total Number of Enrolled Children (Item 16.C.3)	Fair to Good	
5. Number of Children Who Dropped Out This Year (Item 16.C.4)	Fair	In most cases, the figure is reasonable but some grantees/delegate agencies have entered a number which seems to be an estimate of the number of children who will be remaining at the end of the year. If the entry is relatively high in comparison to Item 16.C.3 (70 percent of 16.C.3 or higher), we coded it as missing data.

*Possible problems with all items on actual enrollment (i.e., Items 16.B, 16.C, 16.D, 16.E, and 16.F):

1. Subitems do not add up to total
2. Some items include drop-outs, while others do not.
3. Some items are based on planned rather than actual enrollment.
4. Enrollment totals do not match due to above problem(s), typing error, or other cause.

DATA ITEM	OVERALL RELIABILITY ASSESSMENT	COMMENTS AND PARTICULAR PROBLEMS
6. Race/Ethnic Composition of Enrolled Children A. White (Item 16.D.1) B. Black (Item 16.D.2) C. Hispanics 1. Mexican (Item 16.D.3.a) 2. Puerto Rican (Item 16.D.3.b) 3. Other (Item 16.D.3.c) D. Asian or Pacific Islander (Item 16.D.4) E. American Indian or Alaskan Native (Item 16.D.5) F. Total Number of Enrolled Children (item 16.D.6)	Fair	The total enrollment figure (item 16.D.6) is at times equal to total planned enrollment (Item 16.A.3) or to ACYF funded planned enrollment (Item 16.A.1). For most cases Item 16.D.6 is equal to Item 16.C.3 but at times will differ by 5 to 10 percent, by the number of drop-outs, or by the difference between the actual and planned enrollments. Subitems were either corrected so that the total of the subitems equal the total entry or coded as missing if a reasonable explanation could not be found.
7. Age composition of Enrolled Children A. Three Years Old and Younger (item 16.E.1) B. Four Years Old (Item 16.E.2) C. Five Years Old (Item 16.E.3) D. Six Years Old and Older (Item 16.E.4)	Fair	Basically the same problems as for the previous enrollment item.
8. Enrollment by Program Mode - Part Day Program Only A. Standard Head Start Model (Item 16.F.1) B. Variations In Center Attendance (Item 16.F.2)	Very Poor	This data item has the most problems and has the least reliability of any enrollment item. Per instructions, the respondent was to enter the enrollment information for the mode(s) described in grant application, even if mode changes occurred during year. Planned enrollment was entered in some cases, and occasionally double counting of children was obvious. Frequently,

DATA ITEM	OVERALL RELIABILITY ASSESSMENT	COMMENTS AND PARTICULAR PROBLEMS
8. (Cont'd.) C. Double Sessions (Item 16.F.3) D. Home Based Models (Item 16.F.4) E. Locally Designed Options (Item 16.F.5)		entries in this item did not correspond with subitems of 14.E. (Days).
9. Food Service Information A. Average Number of Children Fed Per Day 1. Average Number of Children Fed Breakfast (Item 17.A.1) 2. Average Number of Children (Item 17.A.2) 3. Average Number of Children Fed Supper (Item 17.A.3) 4. Average Number of Children Fed Snack (Item 17.A.4)	Fair to Poor	Most cases appear to have reasonable data. Some cases appeared to have entered the total number of children fed over a month or two months.

DATA ITEM	OVERALL RELIABILITY ASSESSMENT	COMMENTS AND PARTICULAR PROBLEMS
III. Center Information		
1. Number of Centers Operated (Item 14.A)	Good	No check is possible on these data. Most entries seem reasonable.
2. Number of Classrooms (Item 14.B)	Good to Fair	In some cases, the number of centers was greater than the number of classrooms. In these cases, the data were revised. Number of classes held rather than classrooms would have been appropriate
3. Number of Days of Classroom Operation or Child Contact - Full-Day Program (Item 14.C)	Fair to Poor	Some cases had entries of between two and five which may imply operation for two to five days a week. Respondent entries of greater than 260 occurred and were coded as missing data. We expect a positive bias because of the number of entires entered by respondents at or just below 260. Also, because item specifies the inclusion of days of child contact, days may be included for which the actual classroom is not in operation.
4. Number of Hours of Classroom Operation per Day - Full-Day Program (Item 14.C)	Fair to Poor	Most entries were within our tolerance range. However, in many cases the respondent may have included "day care" or "babysitting" hours in addition to the regular instruction hours.
5. Number of Days of Classroom Operation or Child Contact by Program Mode - Part Day Programs		Similar to the full-day program classroom days item,entries for this item sometimes were either 3, 4 or 5, denoting days per week. Double counting of days occurred in some cases for programs operating e.g., a entry of 392, the figure was halved and entered. The Home Based Model mode had particular problems because of the use of the
A. Standard Head Start Model (Item 14.E.1)	Poor	
B. Variations in Center Attendance (Item 14.E.2)	Poor	
C. Double Session (Item 14.E.3)	Poor	

DATA ITEM	OVERALL RELIABILITY ASSESSMENT	COMMENTS AND PARTICULAR PROBLEMS
5. (Cont'd.) D. Home-based Models (Item 14.E.4) E. Locally Designed Options (Item 14.E.5)	Very Poor	term "activities" and seemed to result in some double counting of days. In a large number of cases, entries in these subitems did not correspond to entries in the subitems of Item 16.F. This will also preclude the use of 14.E and 16.F together for any computed figures.
6. Number of Hours of Classroom Operation Per Day (Item 14.F)	Poor	Some grantees/delegate agencies operating more than one part-day mode operated the different modes for different lengths of time. It seemed in some cases when the double session mode was operated, the number of hours was doubled; but unless some direct indication was given, the hours were not changed. Therefore, we expect a positive bias in the number of hours per day. Also, in many cases we suspect that programs with more than five or six hours of operation included "day care" or "babysitting" hours in their entry.

TABLE C-2

NUMBER AND PERCENT OF 1976 HEAD START RESPONDENTS AND NON-RESPONDENTS, BY FEDERAL REGION

	RESPONDENTS		RESPONDENTS AND NONRESPONDENTS		
Federal Region	Number of Grantees & Delegates	% of Total Number	Number of Grantees & Delegates	% of Total Number	% missing from Region
1	88	5.88%	98	5.79%	10.2%
2	205	13.69	212	12.52	3.3
3	147	10.00	150	8.86	2.0
4	243	16.23	272	16.06	10.7
5	251	16.77	291	17.19	13.7
6	190	12.69	208	12.29	8.7
7	73	4.87	82	4.84	11.0
8	63	4.21	70	4.14	10.0
9	121	8.08	152	8.98	20.4
10	52	3.47	58	3.43	10.3
11	64	4.28	100	5.90	36.0
Total	1,497	100%	1,693	100%	11.6%

TABLE C-3

NUMBER AND PERCENT OF 1976 HEAD START RESPONDENTS AND NONRESPONDENTS BY PROGRAM AUSPICE

PROGRAM AUSPICE	RESPONDENTS		RESPONDENTS AND NONRESPONDENTS		
	No. of Grantees and delegates	% of total no.	No of Grantees and delegates	% of total no.	% missing from region
School	311	20.77	349	20.06%	10.89%
Private, Nonprofit	944	63.06	1021	60.31	7.54
Other, (County, College, Indian Migran, Other)	242	16.17	316	18.67	23.42
Missing			7	0.41	
Total	1,497	100%	1,693	100%	11.6 %

TABLE C-4

NUMBER AND PERCENT OF GRANTEES RESPONDING AND NON-RESPONDING, BY SIZE OF PLANNED ENROLLMENT[1]

PLANNED ENROLLMENT SIZES	RESPONDING GRANTEES		RESPONDING AND NON-RESPONDING GRANTEES		
	No. of Responding Grantees	Percent of Responding Grantees	No. of Responding & Non-responding Grantees or Total Universe	Percent Total of Universe	Percent Non-Responding Grantees of Total Universe
Less than 61 enrollees planned	177	18.1%	199	18.2%	11.1%
61-120 enrollees planned	261	26.7	282	25.8	7.4
121-250 enrollees planned	259	26.5	284	26.0	8.8
251-500 enrollees planned	168	17.2	184	16.8	8.7
501-1,000 enrollees planned	72	7.4	82	7.5	12.2
1,000-2,000 enrollees planned	27	2.8	30	2.7	10.0
Over 2,000 enrollees planned	11	1.1	13	1.2	15.4
Missing	4	0.4	20	1.8	80.0
TOTAL	979	100.0%	1,094	100.0%	10.5%

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[1] Planned enrollment for each non-responding grantee was obtained from the grantee's application form at ACYF. Enrollment figures are applicable at the grantee, rather than respondent level.

APPENDIX D

STATES BY FEDERAL REGION

REGION 1

- Maine
- New Hampshire
- Vermont
- Massachusetts
- Connecticut
- Rhode Island

REGION 2

- New York
- New Jersey
- Puerto Rico

REGION 3

- District of Columbia
- Maryland
- Delaware
- Pennsylvania
- Virginia
- West Virginia

REGION 4

- North Carolina
- South Carolina
- Georgia
- Kentucky
- Tennessee
- Alabama
- Mississippi
- Florida

REGION 5

- Minnesota
- Wisconsin
- Illinois
- Indiana
- Michigan
- Ohio

REGION 6

- Texas
- Louisiana
- Arkansas
- Oklahoma
- New Mexico

REGION 7

- Missouri
- Kansas
- Nebraska
- Iowa

REGION 8

- Colorado
- Utah
- Wyoming
- Montana
- North Dakota
- South Dakota

REGION 9

- California
- Nevada
- Arizona

REGION 10

- Washington
- Oregon
- Hawaii
- Idaho
- Alaska

APPENDIX E

1976/1977 PIR Survey Questionnaire Form

O.M.B. No. 85-R-0313. Approval Expires December 31, 1977

PROJECT HEAD START
PROGRAM INFORMATION REPORT

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

HUMAN DEVELOPMENT SERVICES

ADMINISTRATION FOR CHILDREN, YOUTH AND FAMILIES

NOTE: THIS REPORT IS SUBMITTED FOR YOUR CURRENT OPERATING PERIOD BEGINNING _______, 1976 AND ENDING _______, 1977

(Enter the appropriate beginning and ending dates for your current operating period.)

1. GRANTEE NAME: ____________________ HEAD START GRANT NO: __________

NOTE: Fill in the complete name of the agency to which the Head Start grant is issued. If you changed grantees during the year, use the name of the current grantee.

2. NAME OF AGENCY FOR WHICH THIS REPORT IS SUBMITTED: ____________________

STREET ADDRESS: ____________________

CITY: __________ STATE: __________ ZIP CODE: __________

TELEPHONE NUMBER: ( ) __________ PROGRAM DIRECTOR: __________
AREA CODE

NOTE: Give the complete name of the agency directly operating the Head Start Programs or paying the staff described in this report. It is assumed that in most cases Delegate Agencies will complete their own reports. If this form is being completed by the Grantee on behalf of a Delegate Agency, list the Delegate Agency's name and other requested information in this space. All following items will refer only to programs or staff of the agency named in this Item.

3. AGENCY DESCRIBED IN THIS REPORT IS: *(Check the phrase which describes the agency named in Item 2.)*

☐ DELEGATE AGENCY

☐ GRANTEE WHICH OPERATES PROGRAM(S) *(If you checked this box, omit question 4 and go to question 5)*

☐ GRANTEE WHICH MAINTAINS OCD-FUNDED CENTRAL OFFICE STAFF ONLY *(If you checked this box, refer to Special Instructions on page 7 and answer questions 6 through 13 only.)*

4. TYPE OF DELEGATE AGENCY *(Check the type of Delegate Agency filling out this form.)*

☐ CITY
☐ COUNTY
☐ PRIVATE NON-PROFIT
☐ PRIVATE OR RELIGIOUS AFFILIATED SCHOOL SYSTEM
☐ PUBLIC SCHOOL SYSTEM
☐ COLLEGE OR UNIVERSITY
☐ OTHER *(Specify)* __________

5. TYPES OF PROGRAMS OPERATED *(Check All That Apply)*

☐ FULL DAY PROGRAMS ☐ PART DAY PROGRAMS

6. NAME OF PERSON TO CONTACT REGARDING THIS FORM:	TITLE:	TELEPHONE NUMBER:
7. APPROVING OFFICIAL *(Agency Director or other individual responsible for certifying that this form is the agency's authorized response)*	SIGNATURE:	DATE:

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
8. ETHNIC COMPOSITION OF CYF PAID STAFF *(Data should be entered for all CYF-paid staff who were with the program(s) as of December 31, 1977. Include all staff who receive at least a portion of their salary from CYF Funds. Ethnic and Racial terms refer to those used by the Equal Employment Opportunity Commission and the Office for Civil Rights. In some local situations, it may be necessary to interpret them to fit specific populations or individuals. The respondent's judgement is relied upon to provide the most accurate representation of race and ethnicity.)* A. WHITE *(Not of Hispanic origin - all persons having origins in any of the original peoples of Europe, North Africa, the Middle East, or the Indian subcontinent)*		
B. BLACK *(Not of Hispanic origin - all persons having origins in any of the Black racial groups)*		
C. HISPANIC *(Spanish origin)* 1. MEXICAN *(All persons of Mexican culture or origin, regardless of race)*		
2. PUERTO RICAN *(All persons of Puerto Rican culture or origin, regardless of race)*		
3. OTHER *(All persons of Cuban, Central American but not Mexican, South American or other Spanish culture or origin, regardless of race)*		
D. ASIAN OR PACIFIC ISLANDER *(All persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa)*		
E. AMERICAN INDIAN OR ALASKAN NATIVE *(All persons having origins in any of the original peoples of North America)*		
TOTAL		
9. OTHER INFORMATION FOR CYF PAID STAFF A. NUMBER OF CDA CREDENTIALED STAFF *(Enter the number of staff who have received the Child Development Associate (CDA) Credential awarded by the CDA Consortium.)*		
B. NUMBER OF STAFF WITH DEGREE IN EARLY CHILDHOOD EDUCATION - BACHELOR OR ADVANCED *(Enter the number of staff with Bachelor or advanced degrees in early childhood education awarded by an accredited college or university. See page 7 for definition.)*		
C. NUMBER OF PAID STAFF MEMBERS WHO ARE HEAD START PARENTS *(Include all paid staff members whose children are current or former participants in Head Start.)*		
10. STAFF PAID BY SOURCES OTHER THAN CYF *(Data should be entered as of December 1, 1976.)* A. NUMBER OF STAFF PAID IN FULL BY SOURCES OTHER THAN CYF *(Enter the number of staff whose salaries are fully paid by sources other than CYF, including state and local sources and other Federal assistance programs, e.g. CETA.)*		
B. NUMBER OF STAFF PAID IN PART BY SOURCES OTHER THAN CYF *(Enter the number of staff whose salaries are paid partly by CYF and partly by other sources. This staff is also included in question 8.)*		
11. VOLUNTEER SERVICES INFORMATION A. TOTAL NUMBER OF VOLUNTEERS *(Enter the total number of people who have provided volunteer services to your program(s), exclusive of policy group activities, during your current operating period.)*		
NUMBER OF VOLUNTEERS WHO ARE HEAD START PARENTS *(Include all volunteers whose children are current or former participants in Head Start.)*		
B. TOTAL NUMBER OF VOLUNTEER HOURS		

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
12. AMOUNT OF CYF GRANT *(Fill in the appropriate funding information for Full Day and Part Day Programs. Include only those amounts which apply directly to your program's operation.)* A. MONTH OF FUNDING *(Fill in the month your program year begins.)*		
B. TOTAL AMOUNT OF CYF GRANT AWARD(S) FOR YOUR PRESENT PROGRAM YEAR OPERATING PERIOD	$	$
C. Total amount of OCD Grant Award (s) received during your previous operating period.		
13. REVENUE SOURCES AND COSTS FOR OPERATING PERIOD *(If you have not completed your operating period, please estimate those costs which you anticipate you will incur during the remainder of the operating period.)* A. COSTS INCURRED AGAINST REVENUE AWARDED FOR OPERATING A HEAD START PROGRAM 1. FROM FEDERAL SHARE - PART DAY OR FULL DAY PROGRAM ONLY *(Enter the costs incurred and paid for out of your Federal share for the operating period covered by this report.)*	$	$
2. FROM ACCOUNT 26 - HANDICAPPED FUNDS *(Enter the costs incurred and paid for services to handicapped children from account 26 funds for the operating period covered by this report.)*	$	$
3. FROM NON-FEDERAL SHARE *(Enter the costs incurred against money or services declared as your Non-Federal share. Include everything accepted on your grant award whether or not it exceeds the 20% required by law.)*	$	$
B. COSTS INCURRED FOR FOOD AND/OR FOOD SERVICES WHICH HAVE BEEN OR WILL BE PAID FOR BY USDA FOR THIS OPERATING PERIOD *(Enter the sum of money which you have received or will receive from USDA for your food service component. Include in this sum the amounts you have billed USDA for the operating period where reimbursement should be received after the end of the period.)*	$	$
C. COST INCURRED AND PAID FOR FROM OTHER SOURCES AND NOT DECLARED AS PART OF THE NON-FEDERAL SHARE 1. STATE - REVENUE SHARING *(Enter the amount of costs incurred against monies received from your state as part of their revenue sharing plan.)*	$	$
2. STATE - OTHER *(Enter the amount of costs incurred against monies received from your state or disbursed through your state for the provision of services to children. For example, Title XX monies are included in this category.)*	$	$
3. LOCAL REVENUE SHARING *(Enter the amount of cost incurred against monies received from your local, city, or county government as part of their revenue sharing plan.)*	$	$
4. OTHER FUNDING OR SERVICES *(Enter the amounts of money and value of goods or services used by you during this operating period from all other sources not included in any of the above categories. For instance, for personnel provided by other agencies or Federal assistance programs, e.g. CETA, estimate the cost value of those services, if the actual salaries are not known, by using the amounts you would have to pay if these people were on your payroll.)*	$	$

▨	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
14. CENTERS INFORMATION BY PROGRAM TYPE *(Full Day Programs and Part Day Programs)*		
A. NUMBER OF CENTERS OPERATED *(Fill in the number of Head Start Centers your agency operates by program type.)*		
B. NUMBER OF CLASSROOMS *(Fill in the number of classrooms included in the centers by program type.)*		
C. NUMBER OF DAYS OF CLASSROOM OPERATION OR CHILD CONTACT - FULL DAY PROGRAMS ONLY *(A day of classroom operation or child contact is a day in which Head Start services are provided. Part Day Programs fill in Item E.)*	▨	
D. NUMBER OF HOURS OF CLASSROOM OPERATION PER DAY - FULL DAY PROGRAMS ONLY *(Fill in the number of hours classrooms were in operation with children in attendance. Part Day Programs fill in Item F.)*	▨	
E. NUMBER OF DAYS OF CLASSROOM OPERATION OR CHILD CONTACT BY PROGRAM MODE - PART DAY PROGRAMS ONLY		▨
1. STANDARD HEAD START MODEL *(Fill in the number of days classrooms were in operation during this operating period.)*		▨
2. VARIATIONS IN CENTER ATTENDANCE *(Fill in the number of days classrooms were in operation during this operating period.)*		▨
3. DOUBLE SESSION *(Fill in the number of days of classroom operation during this operating period. Count a morning and afternoon session as ONE day.)*		▨
4. HOME BASED MODELS *(Add the number of days of activities planned for a child. For example, if you operate your program for 40 weeks you have: 1 visit per week by Home Visitor = 40 visits, 1 parent meeting bi-weekly = 20 meetings, 1 classroom day per child week = 40 classroom days. Total Activities = 100.)*		▨
5. LOCALLY DESIGNED OPTIONS *(Fill in the number of days classrooms were in operation during this operating period.)*		▨
F. NUMBER OF HOURS OF CLASSROOM OPERATION PER DAY - PART DAY PROGRAMS ONLY *(Fill in the number of hours classrooms were in operation with children in attendance. Do not include any information for Home Based Models.)*		▨
15. HEALTH SERVICES INFORMATION		
A. MEDICAL SERVICES *(Number of children enrolled refers to all children served during the operating period.)*		
1. NUMBER OF CHILDREN ENROLLED WHO HAVE COMPLETED MEDICAL SCREENING		
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT		
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT		
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED MEDICAL SERVICES REIMBURSED BY MEDICAID (EPSDT)		
B. DENTAL SERVICES *(Number of children enrolled refers to all children served during the operating period.)*		
1. NUMBER OF CHILDREN ENROLLED WHO HAVE COMPLETED DENTAL SCREENING		
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT		
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT		
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED DENTAL SERVICES REIMBURSED BY MEDICAID (EPSDT)		
C. MENTAL HEALTH SERVICES *(Number of children enrolled refers to all children served during the operating period.)*		
1. NUMBER OF CHILDREN ENROLLED, WITH OBSERVED ATYPICAL BEHAVIOR, WHO HAVE COMPLETED MENTAL HEALTH SCREENING		
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT		
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT		
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED MENTAL HEALTH SERVICES REIMBURSED BY MEDICAID (EPSDT)		

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
16. ENROLLMENT INFORMATION *(With exception of Item 16 A., all of the data requested refers to the number of children* ***served****. This means you should count every child enrolled in your program during the entire operating period whether or not that child stayed in the program the entire period.)*		
A. PLANNED ENROLLMENT		
1. NUMBER OF CHILDREN WHO ARE FUNDED BY CYF *(Enter the number of children you agreed to serve in your CYF Head Start grant(s).)*		
2. NUMBER OF ADDITIONAL CHILDREN WHO ARE FUNDED BY OTHER SOURCES *(Enter the number of additional children you are able to serve by use of other sources of funds.)*		
3. TOTAL PLANNED ENROLLMENT *(Enter the total of Items 1 and 2)*		
4. AVERAGE DAILY ATTENDANCE *(Enter as percentage of* TOTAL PLANNED ENROLLMENT. *To calculate, add each day's attendance during this operating period, and divide this total by the number of days during which your classrooms operated. This result should then be divided by Item 3* (TOTAL PLANNED ENROLLMENT) *and multiplied by 100 to give a percentage figure.)* *Exclude* HOME BASED MODELS.		
B. ENROLLMENT REQUIREMENTS		
1. NUMBER OF CHILDREN ABOVE POVERTY LEVEL		
HOW MANY OF THESE CHILDREN ARE HANDICAPPED		
2. NUMBER OF CHILDREN AT OR BELOW POVERTY LEVEL		
HOW MANY OF THESE CHILDREN ARE HANDICAPPED		
C. LENGTH OF ENROLLMENT		
1. NUMBER OF CHILDREN IN THEIR FIRST YEAR OF HEAD START		
2. NUMBER OF CHILDREN IN THEIR SECOND & SUBSEQUENT YEARS		
3. TOTAL NUMBER OF ENROLLED CHILDREN *(Sum of Items 1 and 2)*		
4. NUMBER OF CHILDREN WHO DROPPED OUT THIS YEAR *NOTE: Because these items refer to all children served during the operating year, you should be able to subtract Item 4 from Item 3 and your answer will reflect the number of children in your program at the end of your operations for this operating period.*		
D. RACE/ETHNIC COMPOSITION OF ENROLLED CHILDREN *(Refer to question 8 for Race/Ethnic group definitions.)*		
1. WHITE		
2. BLACK		
3. HISPANIC		
a. MEXICAN		
b. PUERTO RICAN		
c. OTHER		
4. ASIAN OR PACIFIC ISLANDER		
5. AMERICAN INDIAN OR ALASKAN NATIVE		
6. TOTAL NUMBER OF ENROLLED CHILDREN *(Should be the same number as in Item C-3)*		
E. AGE COMPOSITION OF ENROLLED CHILDREN *(Use the age of the child at the beginning of this operating period. For children enrolled during this operating period, use the age at time of enrollment.)*		
1. 3 YEARS OLD AND YOUNGER		
2. 4 YEARS OLD		
3. 5 YEARS OLD		
4. 6 YEARS OLD AND OLDER		
5. TOTAL NUMBER OF ENROLLED CHILDREN *(Should be the same number as in Item C-3)*		

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
16. ENROLLMENT INFORMATION *(Continued)* F. ENROLLMENT BY PROGRAM MODE - PART DAY PROGRAMS ONLY *(If you are operating with two of these models serving the same group of children, please enter the number of children enrolled in the program model described in the work program of your approved grant application.)* 1. STANDARD HEAD START MODEL		
2. VARIATIONS IN CENTER ATTENDANCE		
3. DOUBLE SESSIONS		
4. HOME BASED MODELS		
5. LOCALLY DESIGNED OPTIONS		
17. FOOD SERVICE INFORMATION A. AVERAGE NUMBER OF CHILDREN FED PER DAY *(A separate figure should be calculated and entered for each Item. To calculate, add the number of children fed breakfast (or lunch, or supper, or snacks) each day during March and April of this year, and divide the total by the number of days of classroom operation during that period.)* 1. AVERAGE NUMBER OF CHILDREN FED BREAKFAST		
2. AVERAGE NUMBER OF CHILDREN FED LUNCH		
3. AVERAGE NUMBER OF CHILDREN FED SUPPER		
4. AVERAGE NUMBER OF CHILDREN FED SNACKS		
B. TOTAL COST OF FOOD PURCHASES(Enter the amounts paid out of OCD funds and the amounts reimbursed by USDA so that the total of Items 1 and 2 will reflect the total amount spent for food during the operating period. If you have not completed your operating period, please estimate those costs which you anticipate you will incur during the remainder of the operating period.) 1. FOOD PURCHASES PAID OUT OF CYF FUNDS AND NOT REIMBURSED BY USDA	$	
2. FOOD PURCHASES REIMBURSED, OR TO BE REIMBURSED, BY USDA	$	$
3. FOOD PURCHASES PAID FROM OTHER SOURCES	$	$
18. SOCIAL SERVICES INFORMATION A. NUMBER OF FAMILIES PROVIDED DIRECT SERVICES *('Direct Services' are those provided by the Head Start program.)*		
B. NUMBER OF FAMILIES REFERRED TO OTHER AGENCIES		
C. NUMBER OF FAMILIES REFERRED TO OTHER AGENCIES WITH FOLLOW-UP BY HEAD START		
19. PARENT INVOLVEMENT INFORMATION *(If you have records on these items, enter the numbers contained in your records. If you did not keep records but feel that you can make a reasonably accurate estimate, enter your estimate with an 'E' after it. If neither of the above can be provided, place an 'NA' in the column indicating that this information is not available.)* A. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING POLICY COUNCIL OR POLICY COMMITTEE MEETINGS		
B. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING EDUCATIONAL ACTIVITIES CONDUCTED BY YOUR PROGRAM		
C. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING RECREATIONAL ONLY ACTIVITIES CONDUCTED BY YOUR PROGRAM		
D. NUMBER OF HEAD START PARENTS PARTICIPATING IN ADULT EDUCATION *(e.g. GED, College or Vocational School, etc.)*		

SPECIAL INSTRUCTIONS FOR GRANTEES WHICH MAINTAIN CYF-FUNDED CENTRAL OFFICE STAFF ONLY:

Grantees which do not directly operate a Head Start program but do maintain a CYF-funded, cental offfice staff to assist delegate agencies in their program operations, are requested to provide data about those staff and their activities. In addition to providing necessary identifying information in questions 1, 2, 3, 6 & 7, on the first page, these grantees should answer questions 8 through 13.

Questions 8 & 9 - *Data should be entered according to the program account from which staff are paid.*

Questions 10 & 11 - *For grantees which do not operate programs, program account numbers are not applicable for these questions. If central staff does include, however, any staff paid by other Federal programs, or receives volunteer services, these data should be entered in the Full Day Program, Account 23 column for consistency in reporting.*

Question 12 - *Enter the amount of the CYF grant allocated for central office staff.*

Question 13 - *For 13A & 13C, enter the costs for central office staff according to the appropriate sources from which those costs were paid or will be paid. Omit 13B.*

DEFINITION OF EARLY CHILDHOOD EDUCATION DEGREE *(For question 9B):*

Baccalaureate or higher degree with a major in early childhood education and a minimum of 12 weeks supervised field experience. Teacher training institutions and departments of family studies or home economics (human ecology) offer a major in early childhood education in one of, or a combination of, the following ways: preschool education, nursery school education, pre-kindergarten education, or elementary education with a major in early childhood.

NOTE: *No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations.*

Section 517(c) of Public Law 93-644

COMMENTS *(Use back if necessary):*

APPENDIX F

LIST OF HEAD START PIR VARIABLES

Appendix F contains a list of the Head Start PIR variables used in the analysis for this report. It also provides a brief description of each variable and how it was computed. Preceding the list of variables is an outline which organizes the variables according to the following topical headings:

1. Program/Organizational Characteristics
2. Staffing
3. Costs
4. Enrollment
5. Program Operation
6. Program Activities

The variable list itself contains the following column headings:

- Name
- Variable Description
- Outline
- PIR Reference/Computational Procedure

Name. Under the column heading of "Name" are listed the computer variable names which were created in the SPSS-saved analytical file. (The "analytical file" is distinguished from the raw data file which contains only the raw, edited data elements). The letter "T" which prefixes several of the variable names refers to the aggregate value for part-day and full-day entries. A few variables listed here refer to part-day or full-day programs only. The variable names in these instances are prefixed with "P" for part-day and "F" for full-day. While not listed here for all the individual variables, variables prefixed with "T" could also have "P" and "F" prefixes to appropriately denote part-day and full-day operations, respectively. The numbers and letters which follow the first letter make specific reference to the item number in the PIR survey questionnaire form (Appendix E contains a copy of the PIR form). The letter "R" and "E" which suffix several of the variables generally refer to proportions of totals and "per enrollee" ratios, respectively.

Variable Description. The "Variable Description" column provides a verbal description for each of the variables listed. It also reveals the code values which represent the various categories for categorical (as opposed to continuous) variables.

Outline. Entries in the "Outline" column refer to the topical heading numbers in the outline for the list of variables.

PIR Reference/Computational Procedure. Entries under the column heading of "PIR Reference/Computational Procedure" identify the PIR items from which the analytical variables are constructed. It also states the computational procedures used to construct the analytical variables. The variable names used to state the computational procedure refer to the PIR items by their respective item number in the PIR questionnaire form or to a previously defined variable.

HEAD START PIR VARIABLE LIST

OUTLINE

1. Program/Organizational Characteristics

   1.1 Agency organization
   1.2 Program auspice
   1.3 Type of program
   1.4 SMSA location
   1.5 Federal Region (1-11)

2. Staffing

   2.1 Totals: ACYF or non-ACYF supported
   2.2 Ethnic status of ACYF-supported staff
   2.3 Proportion of ACYF-paid staff
   2.4 Training (CDA, BA)
   2.5 Child/staff ratios

3. Costs

   3.1 Totals: by source, across sources per program (combined part and full day)
   3.2 Proportion of partial to total cost for various categories of costs
   3.3 Ratio of cost(s) to enrollment for various categories of costs
   3.4 Costs for services to the handicapped
   3.5 Costs for food services
   3.6 Salary

4. Enrollment

   4.1 Total enrollment
   4.2 Handicapped children
   4.3 Children at or below poverty level
   4.4 Enrollment by age, race
   4.5 Number of years as Head Start enrollee
   4.6 Planned vs. actual enrollment
   4.7 Number of enrollees who dropped out of Head Start programs
   4.8 Part day mode enrollment

5. Program Operation

   5.1 Beginning and ending dates, hours of operation
   5.2 Total number of centers, number of classrooms
   5.3 Average number of pupils per center, per classroom
   5.4 Part day vs. full day program
   5.5 Degree of ethnic match between staff and children

6. Program Activities

6.1 Totals by line item
6.2 Food services
6.3 Medical, dental and mental health services provided to Head Start children
6.4 Reimbursement by Medicaid
6.5 Social services provided to Head Start families
6.6 Parent involvement in program activities

VARIABLE LIST 1

Program/Organizational Characteristics

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
GRNTID1	Grantee number (1st No.)	(1) a	GIF[1] Item No. 1
GRNTID2	Grantee number-alphanumeric (4 characters)	(1) a	GIF[1] Item No. 1
DELIND	Delegate indicator	(1) a	GIF[1] Item No. 1
CITY	City Code[2]	(1) a	GIF[1] Item No. 1
STATEA	State code - Alphanumeric[2]	(1) a	PIR Item No. 2
STATEN	State code - numeric[2]	(1) a	PIR Item No. 2
COUNTYN	County code, 3 digit numeric[2]	(1) a	PIR Item No. 2
NODELAG	Number of delegate agencies which a grantee has	1.1	GIF[1] Item No. 3
NODELAG2	Number of delegate agencies which a grantee has by category 0 = None 1 = One 2 = 2 to 5 3 = Over 5	1.1	GIF[1] Item No. 3
AGENORG	Agency Organization 1 = Delegate Agency[3] 2 = Grantee Program[4] 3 = Central Office only	1.1	PIR Item No. 3

1/ GIF: Grantee Information Form, which is a half-page, "blue" form attached to a grantee's PIR form.

2/ See 'Coding Instructions for First Card of PIR Data Base' for description of the codes.

3/ In the aggregate file there are none.

4/ This category consists of grantees that operate their own program, inclusive of both those who have delegates and those do not have delegates.

VARIABLE LIST 1
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
AGENORG1	Agency Organization 1 = Delegate Agency 2 = Grantee Program Only (no delegates) 3 = Central Office Only 4 = Grantee with Delegate (grantee operates own program)	1.1	PIR Item No. 3
AGENORG4	Agency Organization 0 = Grantee, no delegates 1 = Grantee, with delegates (Central Office only plus Grantee with Delegate)	1.1	PIR Item No. 3
PROGAUS1	Program - school vs. nonschool 1 = School 2 = Nonschool	1.2	PIR Item No. 4
PROGAUS2	Program Auspice 1 = CAA 2 = School 3 = Other	1.2	PIR Item No. 4
PROGAUS4	Program Auspice 0 = CAA 1 = Other	1.2	PIR Item No. 4
PROGTYPE	Type of Program 1 = Part day 2 = Full day 3 = Both full day & part day 4 = Central staff only	1.3	PIR Iten No. 5

VARIABLE LIST 1
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
PROGTYP2	Type of Program 0 = Part day 1 = Full day or both full day & part day	1.3	PIR Item No. 4
SMSAIND	SMSA Indicator[1] 0 = Non-SMSA 1 = SMSA	1.4	PIR Item No. 2 (address)
SMSA	FIPS SMSA Code[1]	1.4	PIR Item No. 2 (address)
CENCITY	Central City[1] 1 = Central City 2 = Non-central city 3 = Non-SMSA	1.4	PIR Item No. 2 (address)
REGION	Federal Region, Codes 1 to 10 represent the 10 federal regions respectively. 11 = IMPD.	1.5	PIR Item No. 2
GRNTAUS	Grantee Auspice 0 = Delegate agency 1 = City 2 = County 3 = Multiple county 4 = CAA 5 = Limited purpose 6 = School 7 = Other 11 = Indian and migrant 12 = Private nonprofit 13 = College	1.2	PIR Item No. 4

1/ See 'Coding Instructions for First Card of PIR Data Base' for description of the codes.

VARIABLE LIST 1
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE/ COMPUTATIONAL PROCEDURE
DELAUS	Delegate Auspice 0 = Grantee 1 = City 2 = County 3 = Private nonprofit 4 = Private school 5 = Public school 6 = College 7 = Other 11 = Indian and Migrant 12 = CAA 13 = Limited Purpose	1.2	PIR Item No. 4
PROGAUS	Program Auspice 1 = City 2 = County 3 = CAA 4 = School 5 = Limited Purpose 6 = Private Non-profit 7 = College 8 = Other	1.2	PIR Item No. 4

VARIABLE LIST 2

Staffing

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
TSTAFF	Total staff (part plus full time Program) paid by ACYF (part/full) plus total staff (part plus full time program.) not paid by ACYF.	2.1	TSTAFF = P8F + F8F + P10A + F10A
T9A T9B T9C	Totals per program (part + full time): A) number of CDA staff; B) number of staff with B.A Degrees; C) number of paid staff who are parents of Head Start enrollees	2.1	T9A = P9A + F9A T9B = P9B + F9B T9C = P9C + F9C
T11A T11B	Totals per program (part + full time): A) number of volunteers, B) number of volunteers who are Head Start parents	2.1	T11A = P11A + F11A T11B = P11B + F11B
T10A T10B	Totals per program (part + full time): A) staff-fully paid for by non-ACYF funds; B) staff-partly paid for with ACYF funds	2.1	T10A = P10A + F10A T10B = P10B + F10B
T8A T8B T8C1 T8C2 T8C3 T8D T8E T8F	Total per program - ethnic composition of staff per program (Grantee, or Delegate) ACYF paid 8A = White 8B = Black 8C1 = Mexican-Hispanic 8C2 = Puerto Rican-Hispanic 8C3 = "other" Hispanic 8D = Asian/Pacific Islander 8E = American Indian/Alaskan 8F = Total	2.2	T8A = P8A + F8A T8B = P8B + F8B T8C1 = P8C1 + F8C1 T8C2 = P8C2 + F8C2 T8C3 = P8C3 + F8C3 T8D = P8D + F8D T8E = P8E + F8E T8F = P8F + F8F

VARIABLE LIST 2
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
T8C	Totals per program - hispanic staff per program (ACYF-paid) 8C1: Mexican, 8C2: Puerto Rican, 8C3: "other" Hispanic	2.2	T8C = T8C1 + T8C2 + T8C3
T8O	Totals per program - "other" ethnic - Staff other than white, black or hispanic - ACYF paid: 8D Asian/Pacific Islander, 8E American Indian/ Alaskan native	2.2	T8O = T8D + T8E
T8M	Totals per program-minority Staff (excludes 8A = white) paid by ACYF	2.2	T8M = T8F - T8A
T8AR T8BR T8CR T8C1R T8C2R T8C3R T8DR T8ER T8OR T8MR	Proportion of ACYF-paid staff by ethnic group divided by total number of staff where: 8A = White 8B = Black 8C = Total Hispanic 8C1 = Mexican-Hispanic 8C2 = Puerto Rican-Hispanic 8C3 = Other Hispanic 8D = Asian or Pacific Islander 8E = American Indian or Alaskan Native 8O = Other ethnic-Asian/ Pacific Islander or American Indian/ Alaskan Native 8M = Total minority (excludes white) 8F = Total	2.2	T8AR = T8A ÷ T8F T8BR = T8B ÷ T8F T8CR = T8C ÷ T8F T8C1R = T8C1 ÷ T8F T8C2R = T8C2 ÷ T8F T8C3R = T8C3 ÷ T8F T8DR = T8D ÷ T8F T8ER = T8E ÷ T8F T8OR = T8O ÷ T8F T8MR = T8M ÷ T8F
T8FR	Proportion of ACYF paid to total number of staff	2.3	T8FR = T8F ÷ TSTAFF

VARIABLE LIST 2
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
TDSTAFF	Total number of staff with CDA or BA degrees	2.4	TDSTAFF = T9A + T9B
T9AR	Proportion of ACYF-paid staff with CDA credentials	2.4	T9AR = T9A÷T8F
T9BR	Proportion of ACYF-paid staff with B.A. in Early Childhood Education or higher degree	2.4	T9BR = T9B÷T8F
DEGREER	Proportion of ACYF-paid staff with degrees and/or CDA credentials	2.4	DEGREER = TDSTAFF÷T8F
T16C3STF	Child/Staff ratio: Actual total enrollment to total number of staff	2.5	T16C3STF = T16C3÷TSTAFF
T16C3STR or TCHSTR	Child/Staff ratio (based on actual enrollment) by category 1 = Less than 3 2 = 3 to 5 3 = 5 to 7 4 = 7 or more	2.5	Recoded T16C3STF into T16C3STR (or TCHSTR)
T16A3STF	Child/Staff ratio: Planned total enrollment to total number of staff	2.5	T16A3STF = T16A3÷TSTAFF
T16A3STR	Child/Staff ratio (based on planned enrollment) by category 1 = Less than 3 2 = 3 to 5 3 = 5 to 7 4 = Over 7	2.5	Recoded T16A3STF into T16A3STR
T16C38F	Child/Staff ratio: Total planned enrollment to total ACYF-paid staff	2.5	T16C38F = T16C3÷T8F

VARIABLE LIST 2
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
TPCHSTF	Child/Staff ratio: Total planned enrollment to total ACYF-paid Staff	2.5	TPCHSTF = T16A3÷T8F
TPCHSTFR	Child/ACYF-paid Staff ratio (based on planned enrollment) by category 1 = Less than 3 2 = 3 to 5 3 = 5 to 7 4 = Over 7	2.5	Recoded TPCHSTF into TPCHSTFR
T16C3TCH	Child/teaching staff ratio (based on actual enrollment)	2.5	T16C3TCH = T16C3 ÷ (.5 x TSTAFF)
T16C3TCR	Child/teaching staff ratio (based on actual enrollment) by category 1 = Less than 6 2 = 6 to 10 3 = 10 to 14 4 = Over 14	2.5	Recoded T16C3TCH into T16C3TCR
T16A3TCH	Planned child/teaching staff ratio	2.5	T16A3TCH = T16A3 ÷ (.5 x TSTAFF)
T16A3TCR	Planned child/teaching staff by category 1 = Less than 6 2 = 6 to 10 3 = 10 to 14 4 = Over 14	2.5	Recoded T16A3TCH into T16A3TCR

VARIABLE LIST 3

Cost/Funds

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
T12B	Totals by line item per PIR form (combined part + full day program) - cost data 12B = ACYF grant awards 12C = ACYF grantee award for previous operating period 13A1 = Federal share 13A2 = Handicapped funds 13A3 = Non-federal share 13B = Food paid by USDA 13C1 = State-revenue share 13C2 = State-other 13C3 = Local revenue share 13C4 = Other funding 17B1 = Food paid by ACYF 17B2 = Food reimbursed by USDA 17B3 = Food paid by other	3.1	T12B = P12B + F12B
T12C			T12C = P12C + F12C
T13A1			T13A1 = P13A1 + F13A1
T13A2			T13A2 = P13A2 + F13A2
T13A3			T13A3 = P13A3 + F13A3
T13B			T13B = P13B + F13B
T13C1			T13C1 = P13C1 + F13C1
T13C2			T13C2 = P13C2 + F13C2
T13C3			T13C3 = P13C3 + F13C3
T13C4			T13C4 = P13C4 + F13C4
T17B1			T17B1 = P17B1 + F17B1
T17B2			T17B2 = P17B2 + F17B2
T17BT			T17BT = P17BT + F17BT
T12BD	Totals divided by 10,000 for computational purposes	3.1	T12BD = T12B ÷ 10,000
T12CD			T12CD = T12C ÷ 10,000
T13A1D			T13A1D = T13A1 ÷ 10,000
T13A2D			T13A2D = T13A2 ÷ 10,000
T13A3D			T13A3D = T13A3 ÷ 10,000
T13BD			T13BD = T13B ÷ 10,000
T13C1D			T13C1D = T13C1 ÷ 10,000
T13C2D			T13C2D = T13C2 ÷ 10,000
T13C3D			T13C3D = T13C3 ÷ 10,000
T13C4D			T13C4D = T13C4 ÷ 10,000
T17B1D			T17B1D = T17B1 ÷ 10,000
T17B2D			T17B2D = T17B2 ÷ 10,000
T17BTD			T17BTD = T17BT ÷ 10,000

VARIABLE LIST 3
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
TACYFUN TACYFUND	Total ACYF FUNDS + ACYF handicapped funds; divided by 10,000	3.1	TACYFUN = T12B + T13A2 TACYFUND = T12BD + T13A2D
T13C T13CD	Totals costs (part, full day) not paid for by ACYF or declared as the non-federal share; divided by 10,000	3.1	T13C = T13C1 + T13C2 + T13C3 + T13C4 T13CD = T13C1D + T13C2D + T13C3D + T13C4D
TOTHFUN TOTHFUND	Totals costs (part, full day) for food plus total costs not paid for by ACYF and not covered by the non-federal share; divided by 10,000	3.1	TOTHFUN = T13B + T13C TOTHFUND = T13BD + T13CD
TCOST TCOSTD	Total amount of revenues (part, full day) - all sources = (TACYFUN + T13A3 + TOTHFUN) or divided by 10,000 (TACYFUND + T13A3D + TOTHFUND)	3.1	TCOST = TACYFUN + T13A3 + TOTHFUN TCOSTD = TACYFUND + T13A3D + TOTHFUND
TCOST1 TCOST1D	Total ACYF funds plus non-federal share; divided by 10,000	3.1	TCOST1 = T12B + T13A3 TCOST1D = TCOST1 ÷ 10,000
T12BR T12CR T13A2R T13A3R T13BR TACYFUNR T13CR TOTHFUNR T17BTR TCOST1R	Ratio of partial funds or costs to total funds or costs	3.2	T12BR = T12B ÷ TCOST T12CR = T12C ÷ TCOST T13A2R = T13A2 ÷ TCOST T13A3R = T13A3 ÷ TCOST T13BR = T13B ÷ TCOST TACYFUNR = TACYFUN ÷ TCOST T13CR = T13C ÷ TCOST TOTHFUNR = TOTHFUN ÷ TCOST T17BTR = T17BT ÷ TCOST TCOST1R = TCOST1 ÷ TCOST
TCOSTE	Ratio of total costs (from all sources) to total actual enrollment	3.3	TCOSTE = TCOST ÷ T16C3

VARIABLE LIST 3
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
TCOSTPE	Radio of total costs to total planned enrollment	3.3	TCOSTPE = TCOST ÷ T16A3
TCOSTEX TCOSTPEX	Total costs per child, actual and planned, respectively by category: 1 = Less than $1500 2 = $1500 to $2500 3 = $2500 to $3500 4 = $3500 or more	3.3	TCOSTE recoded into TCOSTEX TCOSTPE recoded into TCOSTPEX
T12BE	Ratio of respective funds or costs to total actual enrollment	3.3	T13BE = T12B ÷ T16C3
T12CE			T13CE = T13C ÷ T16C3
T13A2E			T13A2E = T13A2 ÷ T16C3
T13A3E			T13A3E = T13A3 ÷ T16C3
T13BE			T13BE = T13B ÷ T16C3
TACYFUNE			TACYFUNE = TACYFUN ÷ T16C3
T13CE			T13CE = T13C ÷ T16C3
TOTHFUNE			TOTHFUNE = TOTHFUN ÷ T16C3
T17BTE			T17BTE = T17BT ÷ T16C3
TCOST1E			TCOST1E = TCOST1 ÷ T16C3
T12BPE	Ratio of ACYF-funding to planned enrollment	3.3	T13BPE = T12B ÷ T16A3
T12BEX T12BPEX	ACYF-provided cost per child, actual and planned respectively (by category): 1 = Under $1000 2 = $1000 to $1600 3 = $1600 or more	3.3	T12BE recoded into T12BEX T12BPE recoded into T12BPEX
T13A2H	Total of handicapped costs divided by total handicapped enrollment (where T16BH = T16B1A + T16B2A)	3.4	T13A2H = T13A2 ÷ T16BH

VARIABLE LIST 3
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
T17B1 T17B2 T17BT	Food cost information - totals	3.5	T17B1 = P17B1 + F17B1 T17B2 = P17B2 + F17B2 T17BT = P17BT + F17BT
T17BTR	Total food costs divided by total costs	3.5	T17BTR = T17BT ÷ TCOST
T17BTE	Total of food costs divided by total actual enrollment	3.5	T17BTE = T17BT ÷ T16C3
SALARY1	Public school (primary and secondary) teacher salary, regional averages, based on county census data	3.6	1976 Census Bureau information (see Appendix B)

VARIABLE LIST 4

Enrollment

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
T16A1	Planned enrollment funded by ACYF	4.1	T16A1 = P16A1 + F16A1
T16A2	Planned enrollment funded by other sources	4.1	T16A2 = P16A2 + F16A2
T16A3	Total planned enrollment	4.1	T16A3 = P16A3 + F16A3
T16A3X	Total planned enrollment by category: 1 = Less than 101 2 = 101 thru 250 3 = 251 thru 500 4 = Over 500	4.1	T16A3 recoded into T16A3X
T16A3Y	Total planned enrollment by category: 1 = Less than 61 2 = 61 thru 120 3 = 121 thru 250 4 = 251 thru 500 5 = 501 thru 1000 6 = 1001 thru 2000 7 = Over 2000	4.1	T16A3 recoded into T16A3Y
T16B2	Number of children at or below poverty level	4.1	T16B2 = P16B2 + F16B2
T16C1	Number of children in their first year of Head Start	4.1	T16C1 = P16C1 + F16C1
T16C2	Number of children in their second or subsequent year	4.1	T16C2 = P16C2 + F16C2
T16C3	Total actual enrollment	4.1	T16C3 = P16C3 + F16C3
T16C3L	The natural logarithmic value of variable T16C3	4.1	T16C3L = Ln (T16C3)
T16C3X	Total actual enrollment by category: 1 = Less than 101 2 = 101 thru 250 3 = 251 thru 500 4 = Over 500	4.1	T16C3 recoded into T16C3X

VARIABLE LIST 4
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
T16C3Y	Total actual enrollment by category: 1 = Less than 61 2 = 61 thru 120 3 = 121 thru 250 4 = 251 thru 500 5 = 501 thru 1000 6 = 1001 thru 2000 7 = Over 2000	4.1	T16C3 recoded into T16C3Y
T16D1 T16D2 T16D3A T16D3B T16D3C T16D4 T16D5 T16D6	Number actually enrolled by ethnic category: 16D1 = White 16D2 = Black 16D3A = Mexican-Hispanic 16D3B = Puerto Rican-Hispanic 16D3C = Other Hispanic 16D4 = Asian or Pacific Islander 16D5 = American Indian or Alaskan Native 16D6 = Total	4.1	T16D1 = P16D1 + F16D1 T16D2 = P16D2 + F16D2 T16D3A = P16D3A + F16D3A T16D3B = P16D3B + F16D3B T16D3C = P16D3C + F16D3C T16D4 = P16D4 + F16D4 T16D5 = P16D5 + F16D5 T16D6 = P16D6 + F16D6
T16E1 T16E2 T16E3 T16E4 T16E5	Number actually enrolled by age 16E1 = 3 years old & younger 16E2 = 4 years old 16E3 = 5 years old 16E4 = 6 years old & other 16E5 = Total	4.1	T16E1 = P16E1 + F16E1 T16E2 = P16E2 + F16E2 T16E3 = P16E3 + F16E3 T16E4 = P16E4 + F16E4 T16E5 = P16E5 + F16E5
T16BH	Total actual enrollment of handicapped children	4.2	T16BH = T16B1A + T16B2A
T16BHR	Ratio of children handicapped to total actual enrollment	4.2	T16BHR = T16BH/16B
T16B2	Number of children actually enrolled at/or below poverty	4.3	T16B2 = P16B2 + F16B2
T16B2R	Ratio of children at/or below poverty level to total actual enrollment	4.3	T16B2R = T16B2 ÷ T16B
T16B	Total actual enrollment, based on PIR Item 16B	4.3	T16B = T16B1 + T16B2

VARIABLE LIST 4
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
T16D3	Total actual ethnic enrollment	4.4	T16D3 = T16D3A + T16D3B + T16D3C
T16DO	Total actual ethnic enrollment "other" Asian/Pacific Islander + American Indian/Alaskan	4.4	T16DO = T16D4 + D16D5
T16DM	Total number of minority children actually enrolled	4.4	T16DM = T16D6 - T16D1
T16D1R T16D2R T16D3AR T16D3BR T16D3CR T16D4R T16D5R T16D3R T16DOR T16DMR	Proportion of enrollment by race or ethnic group to total actual enrollment 16D1 = White 16D2 = Black 16D3A = Mexican-Hispanic 16D3B = Puerto Rican-Hispanic 16D3C = Other Hispanic 16D4 = Asian or Pacific Islander 16D5 = American Indian/ Alaskan Native 16D3 = Total Hispanic 16DO = Other Ethnic 16DM = Total Minority	4.4	T16D1R = T16D1 ÷ T16D6 T16D2R = T16D2 ÷ T16D6 T16D3AR = T16D3A ÷ T16D6 T16D3BR = T16D3B ÷ T16D6 T16D3CR = T16D3C ÷ T16D6 T16D4R = T16D4 ÷ T16D6 T16D5R = T16D5 ÷ T16D6 T16D3R = T16D3 ÷ T16D6 T16DOR = T16DO ÷ T16D6 T16DMR = T16DM ÷ T16D6
T16E12	Total actual number of children enrolled who are four years and younger	4.4	T16E12 = T16E1 + T16E2
T16E34	Total actual number of children enrolled who are five years and older	4.4	T16E34 = T16E3 + T16E4
T16E1R T16E2R T16E3R T16E4R T16E12R T16E34R	Proportion of children actually enrolled by age 16E1 = 3 years old & younger 16E2 = 4 years old 16E3 = 5 years old 16E4 = 6 years old & older 16E12 = 4 years old & younger 16E34 = 5 years old & older	4.4	T16E1R = T16E1 ÷ T16E5 T16E2R = T16E2 ÷ T16E5 T16E3R = T16E3 ÷ T16E5 T16E4R = T16E4 ÷ T16E5 T16E12R = T16E12 ÷ T16E5 T16E34R = T16E34 ÷ T16E5

VARIABLE LIST 4
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
T16C1R	Proportion of children actually enrolled for fisrt year	4.5	T16C1R = T16C1 ÷ T16C3
T16A1R	Proportion of total planned enrollment funded by ACYF	4.6	T16A1R = T16A1 ÷ T16A3
T16A2R	Proportion of additional enrollees not funded by ACYF	4.6	T16A2R = T16A2 ÷ T16A3
OVERENR	Overenrollment	4.6	OVERNR = T16C3 - T16A3
T16C4R	Proportion of drop-outs to total actual enrollment	4.7	T16C4R = T16C4 ÷ T16C3
P16F	Total enrollment part day program 16F1 = Standard 16F2 = Variation 16F3 = Double session 16F4 = Home based 16F5 = Locally determined	4.8	P16F = P16F1 + P16F2 + P16F3 + P16F4 + P16F5

VARIABLE LIST 5

Program Operation

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
BEGDATE	Beginning date of operation	5.1	Top of first page of PIR form, a four digit number with first two digits the month and last two the year.
ENDDATE	Ending date of operation	5.1	Top of first page of PIR form, a four digit number with first two digits the month and last two the year.
F14D P14D	Number of hours of classroom operation per day; for full day and part day programs respectively	5.1	F14D, P14D, each ÷ 10 (implied decimal in raw data)
T14A T14B	Total number of centers, number of classrooms, respectively	5.2	T14A = P14A + F14A T14B = P14B + F14B
T14B14A	Number of classrooms per center	5.3	T14B14A = T14B ÷ T14A
T16A314A	Planned enrollment per center	5.3	T16A314A = T16A3 ÷ T14A
T16C314A	Actual enrollment per center	5.3	T16C314A = T16C3 ÷ T14A
T16A314B	Planned classroom enrollment	5.3	T16A314B = T16A3 ÷ T14B
T16C314B	Actual Classroom enrollment	5.4	T16C314B = T16C3 ÷ T14B
T16A314W TCLSZE	Classroom enrollment planned and actual, by category, respectively 1 = Less than 15 2 = 15 to 20 3 = 20 to 25 4 = 25 to 30 5 = 30 to 35 6 = 35 to 40 7 = 40 to 60	5.3	T16A314B recoded into T16A314W; T16C314B recoded into TCLSZE

VARIABLE LIST 5

(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
P14E1 P14E2 P14E3 P14E4 P14E5	Number of days of classroom operation, part day program only, by program mode for the following categories: P14E1 = Standard P14E2 = Variation P14E3 = Double session P14E4 = Home based P14E5 = Locally determined	5.4	Items 14E1, 14E2, 14E3, 14E4, 14E5
P14E	Program mode of operation: 1 = Standard model 2 = Variations 3 = Double session 4 = Home based 5 = Locally designed option 6 = Combination	5.4	Derived from items P14E1 thru P14E5. I.e., whether or not a grantee has non-zero entries in P14E1 thru P14E5 in used to identify program mode.
P16F1 P16F2 P16F3 P16F4 P16F5	Enrollment by program model (i.e. standard model, etc.)	5.4	Items 16F1, 16F2, 16F3, 16F4, 16F5
P16F	Total enrollment part day program	5.4	P16F = P16F1 + P16F2 + P16F3 + P16F4 + P16F5
T8M16MR	Ratio of percent staff of minority ethnic origin to enrollee minority ethnic percent	5.5	T8M16MR = T8MR ÷ T16DMR

VARIABLE LIST 6

Program Activities

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
	Line item totals for: health services, number of meals served, social services provided, and parent involment activities	6.1	
	Medical		
T15A1	15A1 = Number completed screening		T15A1 = P15A1 + F15A1
T15A1A	15A1A = Number needing		T15A1A = P15A1A + F15A1A
T15A1B	15A1B = Number receiving		T15A1B = P15A1B + F15A1B
T15A2	15A2 = Reimbursed by MEDICAID		T15A2 = P15A2 + F15A2
	Dental		
T15B1	15B1 = Number completed screening		T15B1 = P15B1 + F15B1
T15B1A	15B1A = Number needing		T15B1A = P15B1A + F15B1A
T15B1B	15B1B = Number receiving		T15B1B = P15B1B + F15B1B
T15B2	15B2 = Reimbursed by MEDICAID		T15B2 = P15B2 + F15B2
	Mental Health		
T15C1	15C1 = Number completed screening		T15C1 = P15C1 + F15C1
T15C1A	15C1A = Number needing		T15C1A = P15C1A + F15C1A
T15C1B	15C1B = Number receiving		T15C1B = P15C1B + F15C1B
T15C2	15C2 = Reimbursed by MEDICAID		T15C2 = P15C2 + F15C2
	Average Number Fed per Day		
T17A1	17A1 = Breakfast		T17A1 = P17A1 + F17A1
T17A2	17A2 = Lunch		T17A2 = P17A2 + F17A2
T17A3	17A3 = Supper		T17A3 = P17A3 + F17A3
T17A4	17A4 = Snack		T17A4 = P17A4 + F17A4
	Social Services-Number of Families		
T18A	18A = Provided direct services		T18A = P18A + F18A
T18B	18B = Referred to other agencies		T18B = P18B + F18B
T18C	18C = Referred with follow-up by Head Start		T18C = P18C + F18C

VARIABLE LIST 6
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
	Average Number of Head Start Parents	6.1	
T19A	19A = Attending policy meetings		T19A = P19A + F19A
T19B	19B = Attending educational activities		T19B = P19B + F19B
T19C	19C = Attending recreational activities		T19C = P19C + F19C
T19D	19D = Participating in adult education		T19D = P19D + F19D
	Number of Head Start Parents		
T9C	9C = Paid staff members		T9C = P9C + F9C
T11A1	11A1 = Volunteers		T11A1 = P11A1 + F11A1
T17A	Total average number of meals served per day	6.2	T17A = T17A1 + T17A2 + T17A3
T17A1R T17A2R T17A3R T17A4R	Average number of meals per day for breakfast, lunch, dinner, snack, respectively based on actual enrollment	6.2	T17A1R = T17A1 ÷ T16C3 T17A2R = T17A2 ÷ T16C3 T17A3R = T17A3 ÷ T16C3 T17A4R = T17A4 ÷ T16C3
T17AR	Average number of meals per child per day (excludes snacks) Based on actual enrollment	6.2	T17AR = (T17A1 + T17A2 + T17A3) ÷ T16C3
T15A1X T15B1X T15C1X	Proportion of enrollees who have completed medical, dental, and mental health screenings, respectively based on actual enrollment	6.3	T15A1X = T15A1 ÷ T16C3 T15B1X = T15B1 ÷ T16C3 T15C1X = T15C1 ÷ T16C3
T15A1AR T15B1AR T15C1AR	Proportion of enrollees needing medical, dental, and mental health treatment, respectively based on actual enrollment	6.3	T15A1AR = T15A1A ÷ T16C3 T15B1AR = T15B1A ÷ T16C3 T15C1AR = T15C1A ÷ T16C3
T15A1BR T15B1BR T15C1BR	Proportion of enrollees who have received medical, dental, and mental health treatment, respectively based on actual enrollment	6.3	T15A1BR = T15A1B ÷ T16C3 T15B1BR = T15B1B ÷ T16C3 T15C1BR = T15C1B ÷ T16C3

VARIABLE LIST 6
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE/ COMPUTATIONAL PROCEDURE
T15AB1BR	Summed proportion: medically treated of total actual enrollment plus dentally treated of total actual enrollment	6.3	T15AB1BR = T15A1BR + T15B1BR
T15A2R T15B2R T15C2R	Proportion of enrollees who received medical, dental, and mental health services reimbursed by Medicaid based on actual enrollment	6.4	T15A2R = T15A2 ÷ T16C3 T15B2R = T15B2 ÷ T16C3 T15C2R = T15C2 ÷ T16C3
T18AR	Ratio of families provided with social services to number of Head Start enrollees based on actual enrollment	6.5	T18AR + T18A ÷ T16C3
T18ARX	Ratio of families provided with social services to number of Head Start enrollees based on actual enrollment. Categorical variable where codes 1 to 4 represent: 1 = 0 - .49 2 = .49 - .89 3 = .89 - 1.0 4 = 1.0 - 6.0	6.5	Recoded T18AR into T18ARX
T18BR	Ratio of family's referrals to number of Head Start enrollees based on actual enrollment	6.5	T18BR = T18B ÷ T16C3
T18CR	Ratio of family's referrals (with follow-ups) to number of Head Start enrollees based on actual enrollment	6.5	T18CR = T18C ÷ T16C3
T19AR	Ratio of parents attending policy meetings to number of enrollees based on actual enrollment	6.6	T19AR = T19A ÷ T16C3

VARIABLE LIST 6
(continued)

NAME	VARIABLE DESCRIPTION	OUTLINE	PIR REFERENCE COMPUTATIONAL PROCEDURE
T19BR	Ratio of parents attending educational activities to number of enrollees based on actual enrollment	6.6	T19BR = T19B ÷ T16C3
T9CR	Ratio of ACYF-paid staff who are parent to Head Start enrollees based on actual enrollment	6.6	T9CR = T9C ÷ T16C3
T11A1R	Ratio of volunteers who are parents to Head Start enrollees based on actual enrollment	6.6	T11A1R = T11A1 ÷ T16C3

MEANS AND REPORTED TOTALS
PER PIR ITEM
APPENDIX G

Appendix G presents arithmetic means and reported totals for each of the items in the PIR Questionnaire. The means are presented in Table G-1, where the unit analysis is the grantee for each of the items, except for 14C, 14D, 14E1 through 14E5, 14F, and 16A4. The means for these items are based on using the individual survey respondent as the unit of analysis since aggregating these variables would lead to uninterpretable results.

Table G-2 gives the reported totals and the number of valid cases for each variable. Again, the unit of analysis for each of the items is the grantee except for 14C, 14D, 14E1 through 14E5, 14F, and 16A4. In this case no reported totals are presented for these items since they would be meaningless. Also, one should note that the number of valid cases for each item is not the same. Since only reported totals are presented and no attempt has been made to compensate for either missing observations or non-responding grantees, any analysis making comparisons across reported totals should be approached in a very cautious manner.

The arithmetic mean and reported totals are not approrpiate statistics for month of funding (Item 12A), but the mode (i.e., the most frequent response) can be reported in the text here. For part-time program the most frequent starting month was September and for full-time programs, January.

TABLE G-1

MEANS PER PIR ITEM

O.M.B. No. 85-R-0313. Approval Expires December 31, 1977

PROJECT HEAD START
PROGRAM INFORMATION REPORT

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

HUMAN DEVELOPMENT SERVICES

ADMINISTRATION FOR CHILDREN, YOUTH AND FAMILIES

NOTE: THIS REPORT IS SUBMITTED FOR YOUR CURRENT OPERATING PERIOD BEGINNING ________, 1976 AND ENDING ______, 1977
(Enter the appropriate beginning and ending dates for your current operating period.)

1. GRANTEE NAME: ______________________ HEAD START GRANT NO: ______________

NOTE: Fill in the complete name of the agency to which the Head Start grant is issued. If you changed grantees during the year, use the name of the current grantee.

2. NAME OF AGENCY FOR WHICH THIS REPORT IS SUBMITTED: ______________________

STREET ADDRESS: ______________________

CITY: ______________ STATE: ______________ ZIP CODE: __________

TELEPHONE NUMBER: (   ) ______________ PROGRAM DIRECTOR: ______________
AREA CODE

NOTE: Give the complete name of the agency directly operating the Head Start Programs or paying the staff described in this report. It is assumed that in most cases Delegate Agencies will complete their own reports. If this form is being completed by the Grantee on behalf of a Delegate Agency, list the Delegate Agency's name and other requested information in this space. All following items will refer only to programs or staff of the agency named in this Item.

3. AGENCY DESCRIBED IN THIS REPORT IS: *(Check the phrase which describes the agency named in Item 2.)*

☐ DELEGATE AGENCY

☐ GRANTEE WHICH OPERATES PROGRAM(S) *(If you checked this box, omit question 4 and go to question 5)*

☐ GRANTEE WHICH MAINTAINS OCD-FUNDED CENTRAL OFFICE STAFF ONLY *(If you checked this box, refer to Special Instructions on page 7 and answer questions 6 through 13 only.)*

4. TYPE OF DELEGATE AGENCY *(Check the type of Delegate Agency filling out this form.)*

☐ CITY
☐ COUNTY
☐ PRIVATE NON-PROFIT
☐ PRIVATE OR RELIGIOUS AFFILIATED SCHOOL SYSTEM
☐ PUBLIC SCHOOL SYSTEM
☐ COLLEGE OR UNIVERSITY
☐ OTHER *(Specify)* ______________

5. TYPES OF PROGRAMS OPERATED *(Check All That Apply)*

☐ FULL DAY PROGRAMS   ☐ PART DAY PROGRAMS

6. NAME OF PERSON TO CONTACT REGARDING THIS FORM:	TITLE:	TELEPHONE NUMBER:
7. APPROVING OFFICIAL *(Agency Director or other individual responsible for certifying that this form is the agency's authorized response)*	SIGNATURE:	DATE:

MEANS - -

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
8. ETHNIC COMPOSITION OF CYF PAID STAFF *(Data should be entered for all CYF-paid staff who were with the program(s) as of December 31, 1977. Include all staff who receive at least a portion of their salary from CYF Funds. Ethnic and Racial terms refer to those used by the Equal Employment Opportunity Commission and the Office for Civil Rights. In some local situations, it may be necessary to interpret them to fit specific populations or individuals. The respondent's judgement is relied upon to provide the most accurate representation of race and ethnicity.)*		
A. WHITE *(Not of Hispanic origin - all persons having origins in any of the original peoples of Europe, North Africa, the Middle East, or the Indian subcontinent)*	19.6 n = 856	10.6 n = 263
B. BLACK *(Not of Hispanic origin - all persons having origins in any of the Black racial groups)*	18.7 n = 855	24.2 n = 263
C. HISPANIC *(Spanish origin)*		
1. MEXICAN *(All persons of Mexican culture or origin, regardless of race)*	3.00 n = 856	5.16 n = 263
2. PUERTO RICAN *(All persons of Puerto Rican culture or origin, regardless of race)*	3.41 n = 855	0.331 n = 263
3. OTHER *(All persons of Cuban, Central American but not Mexican, South American or other Spanish culture or origin, regardless of race)*	0.242 n = 856	0.479 n = 263
D. ASIAN OR PACIFIC ISLANDER *(All persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa)*	0.507 n = 856	0.106 n = 263
E. AMERICAN INDIAN OR ALASKAN NATIVE *(All persons having origins in any of the original peoples of North America)*	1.23 n = 856	2.45 n = 263
TOTAL	47.3 n = 857	43.8 n = 263
9. OTHER INFORMATION FOR CYF PAID STAFF		
A. NUMBER OF CDA CREDENTIALED STAFF *(Enter the number of staff who have received the Child Development Associate (CDA) Credential awarded by the CDA Consortium.)*	1.12 n = 822	1.16 n = 241
B. NUMBER OF STAFF WITH DEGREE IN EARLY CHILDHOOD EDUCATION - BACHELOR OR ADVANCED *(Enter the number of staff with Bachelor or advanced degrees in early childhood education awarded by an accredited college or university. See page 7 for definition.)*	3.80 n = 828	3.41 n = 248
C. NUMBER OF PAID STAFF MEMBERS WHO ARE HEAD START PARENTS *(Include all paid staff members whose children are current or former participants in Head Start.)*	14.1 n = 856	10.5 n = 253
10. STAFF PAID BY SOURCES OTHER THAN CYF *(Data should be entered as of December 1, 1976.)*		
A. NUMBER OF STAFF PAID IN FULL BY SOURCES OTHER THAN CYF *(Enter the number of staff whose salaries are fully paid by sources other than CYF, including state and local sources and other Federal assistance programs, e.g. CETA.)*	4.29 n = 817	6.43 n = 246
B. NUMBER OF STAFF PAID IN PART BY SOURCES OTHER THAN CYF *(Enter the number of staff whose salaries are paid partly by CYF and partly by other sources. This staff is also included in question 8.)*	4.51 n = 764	3.35 n = 227
11. VOLUNTEER SERVICES INFORMATION		
A. TOTAL NUMBER OF VOLUNTEERS *(Enter the total number of people who have provided volunteer services to your program(s), exclusive of policy group activities, during your current operating period.)*	432.4 n = 846	372.3 n = 259
] NUMBER OF VOLUNTEERS WHO ARE HEAD START PARENTS *(Include all volunteers whose children are current or former participants in Head Start.)*	320.8 n = 844	218.3 n = 257
B. TOTAL NUMBER OF VOLUNTEER HOURS	11,856.9 n = 818	9,012.1 n = 249

MEANS

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
12. AMOUNT OF CYF GRANT *(Fill in the appropriate funding information for Full Day and Part Day Programs. Include only those amounts which apply directly to your program's operation.)*		
A. MONTH OF FUNDING *(Fill in the month your program year begins.)*	-----	-----
B. TOTAL AMOUNT OF CYF GRANT AWARD(S) FOR YOUR PRESENT PROGRAM YEAR OPERATING PERIOD	337,167 $ n = 850	364,233 $ n = 251
C. Total amount of OCD Grant Award (s) received during your previous operating period.	326,698 n = 826	368,038 n = 246
13. REVENUE SOURCES AND COSTS FOR OPERATING PERIOD *(If you have not completed your operating period, please estimate those costs which you anticipate you will incur during the remainder of the operating period.)*		
A. COSTS INCURRED AGAINST REVENUE AWARDED FOR OPERATING A HEAD START PROGRAM		
1. FROM FEDERAL SHARE - PART DAY OR FULL DAY PROGRAM ONLY *(Enter the costs incurred and paid for out of your Federal share for the operating period covered by this report.)*	318,466 n = 824 $	344,036 n = 243 $
2. FROM ACCOUNT 26 - HANDICAPPED FUNDS *(Enter the costs incurred and paid for services to handicapped children from account 26 funds for the operating period covered by this report.)*	14,196 $ n = 810	15,417 $ n = 213
3. FROM NON-FEDERAL SHARE *(Enter the costs incurred against money or services declared as your Non-Federal share. Include everything accepted on your grant award whether or not it exceeds the 20% required by law.)*	94,267 n = 837 $	95,314 n = 252 $
B. COSTS INCURRED FOR FOOD AND/OR FOOD SERVICES WHICH HAVE BEEN OR WILL BE PAID FOR BY USDA FOR THIS OPERATING PERIOD *(Enter the sum of money which you have received or will receive from USDA for your food service component. Include in this sum the amounts you have billed USDA for the operating period where reimbursement should be received after the end of the period.)*	27,225 n = 830 $	35,126 n = 248 $
C. COST INCURRED AND PAID FOR FROM OTHER SOURCES AND NOT DECLARED AS PART OF THE NON-FEDERAL SHARE		
1. STATE - REVENUE SHARING *(Enter the amount of costs incurred against monies received from your state as part of their revenue sharing plan.)*	98 n = 858 $	120 n = 262 $
2. STATE - OTHER *(Enter the amount of costs incurred against monies received from your state or disbursed through your state for the provision of services to children. For example, Title XX monies are included in this category.)*	12,196 n = 854 $	15,046 n = 257 $
3. LOCAL REVENUE SHARING *(Enter the amount of cost incurred against monies received from your local, city, or county government as part of their revenue sharing plan.)*	432 $ n = 858	470 $ n = 262
4. OTHER FUNDING OR SERVICES *(Enter the amounts of money and value of goods or services used by you during this operating period from all other sources not included in any of the above categories. For instance, for personnel provided by other agencies or Federal assistance programs, e.g. CETA, estimate the cost value of those services, if the actual salaries are not known, by using the amounts you would have to pay if these people were on your payroll.)*	18,347 n = 855 $	17,271 n = 261 $

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MEANS

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
14. CENTERS INFORMATION BY PROGRAM TYPE *(Full Day Programs and Part Day Programs)* A. NUMBER OF CENTERS OPERATED *(Fill in the number of Head Start Centers your agency operates by program type.)*	6.48 n = 856	4.58 n = 262
B. NUMBER OF CLASSROOMS *(Fill in the number of classrooms included in the centers by program type.)*	11.9 n = 843	11.1 n = 259
C. NUMBER OF DAYS OF CLASSROOM OPERATION OR CHILD CONTACT - FULL DAY PROGRAMS ONLY *(A day of classroom operation or child contact is a day in which Head Start services are provided. Part Day Programs fill in Item E.)*	▨	206.3 n = 332
D. NUMBER OF HOURS OF CLASSROOM OPERATION PER DAY - FULL DAY PROGRAMS ONLY *(Fill in the number of hours classrooms were in operation with children in attendance. Part Day Programs fill in Item F.)*	▨	8.42 n = 337*
E. NUMBER OF DAYS OF CLASSROOM OPERATION OR CHILD CONTACT BY PROGRAM MODE - PART DAY PROGRAMS ONLY 1. STANDARD HEAD START MODEL *(Fill in the number of days classrooms were in operation during this operating period.)*	166.6 n = 715*	▨
2. VARIATIONS IN CENTER ATTENDANCE *(Fill in the number of days classrooms were in operation during this operating period.)*	139.8 n =275*	▨
3. DOUBLE SESSION *(Fill in the number of days of classroom operation during this operating period. Count a morning and afternoon session as ONE day.)*	172.7 n = 275*	▨
4. HOME BASED MODELS *(Add the number of days of activities planned for a child. For example, if you operate your program for 40 weeks you have: 1 visit per week by Home Visitor = 40 visits, 1 parent meeting bi-weekly = 20 meetings, 1 classroom day per child week = 40 classroom days. Total Activities = 100.)*	84.0 n = 250*	▨
5. LOCALLY DESIGNED OPTIONS *(Fill in the number of days classrooms were in operation during this operating period.)*	140.8 n = 85*	▨
F. NUMBER OF HOURS OF CLASSROOM OPERATION PER DAY - PART DAY PROGRAMS ONLY *(Fill in the number of hours classrooms were in operation with children in attendance. Do not include any information for Home Based Models.)*	5.01 n = 1,158*	▨
15. HEALTH SERVICES INFORMATION A. MEDICAL SERVICES *(Number of children enrolled refers to all children served during the operating period.)* 1. NUMBER OF CHILDREN ENROLLED WHO HAVE COMPLETED MEDICAL SCREENING	253.8 n = 853	234.3 n = 253
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT	71.7 n=831	53.1 n=242
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT	74.1 n=826	62.1 n=242
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED MEDICAL SERVICES REIMBURSED BY MEDICAID (EPSDT)	76.9 n = 816	52.3 n = 239
B. DENTAL SERVICES *(Number of children enrolled refers to all children served during the operating period.)* 1. NUMBER OF CHILDREN ENROLLED WHO HAVE COMPLETED DENTAL SCREENING	231.2 n = 851	234.0 n = 249
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT	119.5 n=836	86.6 n=246
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT	113.1 n=834	79.3 n=244
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED DENTAL SERVICES REIMBURSED BY MEDICAID (EPSDT)	63.4 n = 810	38.5 n = 235
C. MENTAL HEALTH SERVICES *(Number of children enrolled refers to all children served during the operating period.)* 1. NUMBER OF CHILDREN ENROLLED, WITH OBSERVED ATYPICAL BEHAVIOR, WHO HAVE COMPLETED MENTAL HEALTH SCREENING	74.2 n = 822	46.9 n = 245
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT	14.2 n=817	10.6 n=247
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT	12.9 n=818	9.7 n=247
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED MENTAL HEALTH SERVICES REIMBURSED BY MEDICAID (EPSDT)	3.9 n = 780	1.9 n = 232

*For these variables the unit of analysis is the individual respondent.

MEANS

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
16. ENROLLMENT INFORMATION *(With exception of Item 16 A., all of the data requested refers to the number of children served. This means you should count every child enrolled in your program during the entire operating period whether or not that child stayed in the program the entire period.)*		
A. PLANNED ENROLLMENT		
1. NUMBER OF CHILDREN WHO ARE FUNDED BY CYF *(Enter the number of children you agreed to serve in your CYF Head Start grant(s).)*	242.4 n = 856	201.6 n = 261
2. NUMBER OF ADDITIONAL CHILDREN WHO ARE FUNDED BY OTHER SOURCES *(Enter the number of additional children you are able to serve by use of other sources of funds.)*	9.5 n = 857	13.2 n = 261
3. TOTAL PLANNED ENROLLMENT *(Enter the total of Items 1 and 2)*	251.8 n=857	214.7 n=261
4. AVERAGE DAILY ATTENDANCE *(Enter as percentage of TOTAL PLANNED ENROLLMENT. To calculate, add each day's attendance during this operating period, and divide this total by the number of days during which your classrooms operated. This result should then be divided by Item 3 (TOTAL PLANNED ENROLLMENT) and multiplied by 100 to give a percentage figure.)* Exclude HOME BASED MODELS.	82.5 n = 1,140*	81.8 n = 330*
B. ENROLLMENT REQUIREMENTS 1. NUMBER OF CHILDREN ABOVE POVERTY LEVEL	18.4 n = 836	17.9 n = 255
HOW MANY OF THESE CHILDREN ARE HANDICAPPED	4.9 n=827	3.2 n=257
2. NUMBER OF CHILDREN AT OR BELOW POVERTY LEVEL	251.8 n=834	206.9 n=254
HOW MANY OF THESE CHILDREN ARE HANDICAPPED	29.7 n=823	23.3 n=251
C. LENGTH OF ENROLLMENT 1. NUMBER OF CHILDREN IN THEIR FIRST YEAR OF HEAD START	208.8 n = 850	131.7 n = 252
2. NUMBER OF CHILDREN IN THEIR SECOND & SUBSEQUENT YEARS	65.4 n=849	103.9 n=254
3. TOTAL NUMBER OF ENROLLED CHILDREN *(Sum of Items 1 and 2)*	275.2 n=855	233.5 n=260
4. NUMBER OF CHILDREN WHO DROPPED OUT THIS YEAR *NOTE: Because these items refer to all children served during the operating year, you should be able to subtract Item 4 from Item 3 and your answer will reflect the number of children in your program at the end of your operations for this operating period.*	45.9 n = 830	45.7 n = 247
D. RACE/ETHNIC COMPOSITION OF ENROLLED CHILDREN *(Refer to question 8 for Race/Ethnic group definitions.)* 1. WHITE	98.3 n = 850	46.1 n = 261
2. BLACK	115.7 n=852	125.3 n=261
3. HISPANIC a. MEXICAN	24.7 n = 850	37.0 n = 261
b. PUERTO RICAN	18.5 n=850	3.9 n=261
c. OTHER	2.7 n=851	3.5 n=261
4. ASIAN OR PACIFIC ISLANDER	4.0 n=852	1.4 n=261
5. AMERICAN INDIAN OR ALASKAN NATIVE	8.6 n=851	14.3 n=261
6. TOTAL NUMBER OF ENROLLED CHILDREN *(Should be the same number as in Item C-3)*	274.2 n=853	232.6 n=260
E. AGE COMPOSITION OF ENROLLED CHILDREN *(Use the age of the child at the beginning of this operating period. For children enrolled during this operating period, use the age at time of enrollment.)* 1. 3 YEARS OLD AND YOUNGER	48.5 n = 853	64.5 n = 259
2. 4 YEARS OLD	157.5 n=853	110.5 n=259
3. 5 YEARS OLD	64.8 n=852	50.0 n=259
4. 6 YEARS OLD AND OLDER	2.7 n=853	4.5 n=260
5. TOTAL NUMBER OF ENROLLED CHILDREN *(Should be the same number as in Item C-3)*	274.9 n=852	232.4 n=260

*For these variables the unit of analysis is the individual respondent.

	MEANS	
	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
16. ENROLLMENT INFORMATION *(Continued)*		
F. ENROLLMENT BY PROGRAM MODE - PART DAY PROGRAMS ONLY *(If you are operating with two of these models serving the same group of children, please enter the number of children enrolled in the program model described in the work program of your approved grant application.)*		
1. STANDARD HEAD START MODEL	150.0 n = 853	▨
2. VARIATIONS IN CENTER ATTENDANCE	46.6 n=854	▨
3. DOUBLE SESSIONS	47.8 n=855	▨
4. HOME BASED MODELS	11.8 n=850	▨
5. LOCALLY DESIGNED OPTIONS	8.1 n=857	▨
17. FOOD SERVICE INFORMATION		
A. AVERAGE NUMBER OF CHILDREN FED PER DAY *(A separate figure should be calculated and entered for each Item. To calculate, add the number of children fed breakfast (or lunch, or supper, or snacks) each day during March and April of this year, and divide the total by the number of days of classroom operation during that period.)*		
1. AVERAGE NUMBER OF CHILDREN FED BREAKFAST	130.3 n = 858	148.7 n = 253
2. AVERAGE NUMBER OF CHILDREN FED LUNCH	202.8 n=846	179.9 n=255
3. AVERAGE NUMBER OF CHILDREN FED SUPPER	2.40 n=850	1.57 n=256
4. AVERAGE NUMBER OF CHILDREN FED SNACKS	165.9 n=847	181.7 n=256
B. TOTAL COST OF FOOD PURCHASES(Enter the amounts paid out of OCD funds and the amounts reimbursed by USDA so that the total of Items 1 and 2 will reflect the total amount spent for food during the operating period. If you have not completed your operating period, please estimate those costs which you anticipate you will incur during the remainder of the operating period.)	5,127 n = 816	5,422 n = 236
1. FOOD PURCHASES PAID OUT OF CYF FUNDS AND NOT REIMBURSED BY USDA	$	
2. FOOD PURCHASES REIMBURSED, OR TO BE REIMBURSED, BY USDA	$21,608 n=814	$27,820 n=234
3. FOOD PURCHASES PAID FROM OTHER SOURCES	$26,759 n=814	$33,288 n=234
18. SOCIAL SERVICES INFORMATION		
A. NUMBER OF FAMILIES PROVIDED DIRECT SERVICES *('Direct Services' are those provided by the Head Start program.)*	191.3 n = 848	169.2 n = 252
B. NUMBER OF FAMILIES REFERRED TO OTHER AGENCIES	91.4 n=838	73.8 n=246
C. NUMBER OF FAMILIES REFERRED TO OTHER AGENCIES WITH FOLLOW-UP BY HEAD START	99.5 n=838	61.8 n=246
19. PARENT INVOLVEMENT INFORMATION *(If you have records on these items, enter the numbers contained in your records. If you did not keep records but feel that you can make a reasonably accurate estimate, enter your estimate with an 'E' after it. If neither of the above can be provided, place an 'NA' in the column indicating that this information is not available.)*		
A. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING POLICY COUNCIL OR POLICY COMMITTEE MEETINGS	31.8 n = 831	25.8 n = 246
B. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING EDUCATIONAL ACTIVITIES CONDUCTED BY YOUR PROGRAM	71.2 n = 822	52.9 n = 248
C. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING RECREATIONAL ONLY ACTIVITIES CONDUCTED BY YOUR PROGRAM	95.8 n = 801	75.0 n = 241
D. NUMBER OF HEAD START PARENTS PARTICIPATING IN ADULT EDUCATION *(e.g. GED, College or Vocational School, etc.)*	18.2 n = 808	20.2 n = 249

SPECIAL INSTRUCTIONS FOR GRANTEES WHICH MAINTAIN CYF-FUNDED CENTRAL OFFICE STAFF ONLY:

Grantees which do not directly operate a Head Start program but do maintain a CYF-funded, cental offfice staff to assist delegate agencies in their program operations, are requested to provide data about those staff and their activities. In addition to providing necessary identifying information in questions 1, 2, 3, 6 & 7, on the first page, these grantees should answer questions 8 through 13.

Questions 8 & 9 -	*Data should be entered according to the program account from which staff are paid.*
Questions 10 & 11 -	*For grantees which do not operate programs, program account numbers are not applicable for these questions. If central staff does include, however, any staff paid by other Federal programs, or receives volunteer services, these data should be entered in the Full Day Program, Account 23 column for consistency in reporting.*
Question 12 -	*Enter the amount of the CYF grant allocated for central office staff.*
Question 13 -	*For 13A & 13C, enter the costs for central office staff according to the appropriate sources from which those costs were paid or will be paid. Omit 13B.*

DEFINITION OF EARLY CHILDHOOD EDUCATION DEGREE *(For question 9B):*

Baccalaureate or higher degree with a major in early childhood education and a minimum of 12 weeks supervised field experience. Teacher training institutions and departments of family studies or home economics (human ecology) offer a major in early childhood education in one of, or a combination of, the following ways: preschool education, nursery school education, pre-kindergarten education, or elementary education with a major in early childhood.

NOTE: *No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations.*

Section 517(c) of Public Law 93-644

COMMENTS *(Use back if necessary):*

TABLE G-2

REPORTED TOTALS PER PIR ITEM

O.M.B. No. 85-R-0313. Approval Expires December 31, 1977

PROJECT HEAD START PROGRAM INFORMATION REPORT

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

HUMAN DEVELOPMENT SERVICES

ADMINISTRATION FOR CHILDREN, YOUTH AND FAMILIES

NOTE: THIS REPORT IS SUBMITTED FOR YOUR CURRENT OPERATING PERIOD BEGINNING ________, 1976 AND ENDING ______, 1977
(Enter the appropriate beginning and ending dates for your current operating period.)

1. GRANTEE NAME: ________________________ HEAD START GRANT NO: ____________

NOTE: Fill in the complete name of the agency to which the Head Start grant is issued. If you changed grantees during the year, use the name of the current grantee.

2. NAME OF AGENCY FOR WHICH THIS REPORT IS SUBMITTED: ________________________

STREET ADDRESS: ________________________

CITY: ____________ STATE: ____________ ZIP CODE: ____________

TELEPHONE NUMBER: (   ) ____________ PROGRAM DIRECTOR: ____________
AREA CODE

NOTE: Give the complete name of the agency directly operating the Head Start Programs or paying the staff described in this report. It is assumed that in most cases Delegate Agencies will complete their own reports. If this form is being completed by the Grantee on behalf of a Delegate Agency, list the Delegate Agency's name and other requested information in this space. All following items will refer only to programs or staff of the agency named in this Item.

3. AGENCY DESCRIBED IN THIS REPORT IS: *(Check the phrase which describes the agency named in Item 2.)*

☐ DELEGATE AGENCY

☐ GRANTEE WHICH OPERATES PROGRAM(S) *(If you checked this box, omit question 4 and go to question 5)*

☐ GRANTEE WHICH MAINTAINS OCD-FUNDED CENTRAL OFFICE STAFF ONLY *(If you checked this box, refer to Special Instructions on page 7 and answer questions 6 through 13 only.)*

4. TYPE OF DELEGATE AGENCY *(Check the type of Delegate Agency filling out this form.)*

☐ CITY
☐ COUNTY
☐ PRIVATE NON-PROFIT
☐ PRIVATE OR RELIGIOUS AFFILIATED SCHOOL SYSTEM
☐ PUBLIC SCHOOL SYSTEM
☐ COLLEGE OR UNIVERSITY
☐ OTHER *(Specify)* ____________

5. TYPES OF PROGRAMS OPERATED *(Check All That Apply)*

☐ FULL DAY PROGRAMS ☐ PART DAY PROGRAMS

6. NAME OF PERSON TO CONTACT REGARDING THIS FORM:	TITLE:	TELEPHONE NUMBER:
7. APPROVING OFFICIAL *(Agency Director or other individual responsible for certifying that this form is the agency's authorized response)*	SIGNATURE:	DATE:

REPORTED TOTALS -

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
8. ETHNIC COMPOSITION OF CYF PAID STAFF *(Data should be entered for all CYF-paid staff who were with the program(s) as of December 31, 1977. Include all staff who receive at least a portion of their salary from CYF Funds. Ethnic and Racial terms refer to those used by the Equal Employment Opportunity Commission and the Office for Civil Rights. In some local situations, it may be necessary to interpret them to fit specific populations or individuals. The respondent's judgement is relied upon to provide the most accurate representation of race and ethnicity.)*		
A. WHITE *(Not of Hispanic origin - all persons having origins in any of the original peoples of Europe, North Africa, the Middle East, or the Indian subcontinent)*	16,771 n = 856	2,792 n = 263
B. BLACK *(Not of Hispanic origin - all persons having origins in any of the Black racial groups)*	15,998 n = 855	6,359 n = 263
C. HISPANIC *(Spanish origin)*		
1. MEXICAN *(All persons of Mexican culture or origin, regardless of race)*	2,570 n = 856	1,358 n = 263
2. PUERTO RICAN *(All persons of Puerto Rican culture or origin, regardless of race)*	2,917 n = 855	87 n = 263
3. OTHER *(All persons of Cuban, Central American but not Mexican, South American or other Spanish culture or origin, regardless of race)*	207 n = 856	126 n = 263
D. ASIAN OR PACIFIC ISLANDER *(All persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa)*	434 n = 856	28 n = 263
E. AMERICAN INDIAN OR ALASKAN NATIVE *(All persons having origins in any of the original peoples of North America)*	1,056 n = 856	645 n = 263
TOTAL	40,533 n = 857	11,523 n = 263
9. OTHER INFORMATION FOR CYF PAID STAFF		
A. NUMBER OF CDA CREDENTIALED STAFF *(Enter the number of staff who have received the Child Development Associate (CDA) Credential awarded by the CDA Consortium.)*	924 n = 822	279 n = 241
B. NUMBER OF STAFF WITH DEGREE IN EARLY CHILDHOOD EDUCATION - BACHELOR OR ADVANCED *(Enter the number of staff with Bachelor or advanced degrees in early childhood education awarded by an accredited college or university. See page 7 for definition.)*	3,145 n = 828	845 n = 248
C. NUMBER OF PAID STAFF MEMBERS WHO ARE HEAD START PARENTS *(Include all paid staff members whose children are current or former participants in Head Start.)*	11,891 n = 846	2,654 n = 253
10. STAFF PAID BY SOURCES OTHER THAN CYF *(Data should be entered as of December 1, 1976.)*		
A. NUMBER OF STAFF PAID IN FULL BY SOURCES OTHER THAN CYF *(Enter the number of staff whose salaries are fully paid by sources other than CYF, including state and local sources and other Federal assistance programs, e.g. CETA.)*	3,506 n = 817	1,582 n = 246
B. NUMBER OF STAFF PAID IN PART BY SOURCES OTHER THAN CYF *(Enter the number of staff whose salaries are paid partly by CYF and partly by other sources. This staff is also included in question 8.)*	3,445 n = 764	760 n = 227
11. VOLUNTEER SERVICES INFORMATION		
A. TOTAL NUMBER OF VOLUNTEERS *(Enter the total number of people who have provided volunteer services to your program(s), exclusive of policy group activities, during your current operating period.)*	358,209 n = 846	96,414 n = 259
NUMBER OF VOLUNTEERS WHO ARE HEAD START PARENTS *(Include all volunteers whose children are current or former participants in Head Start.)*	270,782 n = 844	56,104 n = 257
B. TOTAL NUMBER OF VOLUNTEER HOURS	9,698,942 n = 818	2,468,110 n = 249

	REPORTED TOTALS	
	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
12. AMOUNT OF CYF GRANT *(Fill in the appropriate funding information for Full Day and Part Day Programs. Include only those amounts which apply directly to your program's operation.)*		
A. MONTH OF FUNDING *(Fill in the month your program year begins.)*	------	------
B. TOTAL AMOUNT OF CYF GRANT AWARD(S) FOR YOUR PRESENT PROGRAM YEAR OPERATING PERIOD	289,591,738 $ n = 850	91,422,499 $ n = 251
C. Total amount of OCD Grant Award (s) received during your previous operating period.	269,852,135 n = 826	90,537,379 n = 246
13. REVENUE SOURCES AND COSTS FOR OPERATING PERIOD *(If you have not completed your operating period, please estimate those costs which you anticipate you will incur during the remainder of the operating period.)*		
A. COSTS INCURRED AGAINST REVENUE AWARDED FOR OPERATING A HEAD START PROGRAM		
1. FROM FEDERAL SHARE - PART DAY OR FULL DAY PROGRAM ONLY *(Enter the costs incurred and paid for out of your Federal share for the operating period covered by this report.)*	262,415,778 $ n = 824	83,600,794 $ n = 243
2. FROM ACCOUNT 26 - HANDICAPPED FUNDS *(Enter the costs incurred and paid for services to handicapped children from account 26 funds for the operating period covered by this report.)*	11,498,852 $ n = 810	3,283,877 $ n = 213
3. FROM NON-FEDERAL SHARE *(Enter the costs incurred against money or services declared as your Non-Federal share. Include everything accepted on your grant award whether or not it exceeds the 20% required by law.)*	78,901,532 $ n = 837	23,019,034 $ n = 252
B. COSTS INCURRED FOR FOOD AND/OR FOOD SERVICES WHICH HAVE BEEN OR WILL BE PAID FOR BY USDA FOR THIS OPERATING PERIOD *(Enter the sum of money which you have received or will receive from USDA for your food service component. Include in this sum the amounts you have billed USDA for the operating period where reimbursement should be received after the end of the period.)*	22,596,400 $ n = 830	8,711,291 $ n = 248
C. COST INCURRED AND PAID FOR FROM OTHER SOURCES AND NOT DECLARED AS PART OF THE NON-FEDERAL SHARE		
1. STATE - REVENUE SHARING *(Enter the amount of costs incurred against monies received from your state as part of their revenue sharing plan.)*	84,138 n = 858 $	31,336 n = 262 $
2. STATE - OTHER *(Enter the amount of costs incurred against monies received from your state or disbursed through your state for the provision of services to children. For example, Title XX monies are included in this category.)*	10,415,771 $ n = 854	3,866,824 $ n = 257
3. LOCAL REVENUE SHARING *(Enter the amount of cost incurred against monies received from your local, city, or county government as part of their revenue sharing plan.)*	370,408 $ n = 858	123,117 $ n = 262
4. OTHER FUNDING OR SERVICES *(Enter the amounts of money and value of goods or services used by you during this operating period from all other sources not included in any of the above categories. For instance, for personnel provided by other agencies or Federal assistance programs, e.g. CETA, estimate the cost value of those services, if the actual salaries are not known, by using the amounts you would have to pay if these people were on your payroll.)*	15,686,722 $ n = 855	4,507,668 $ n = 261

	REPORTED TOTALS	
	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
14. CENTERS INFORMATION BY PROGRAM TYPE *(Full Day Programs and Part Day Programs)*		
A. NUMBER OF CENTERS OPERATED *(Fill in the number of Head Start Centers your agency operates by program type.)*	5,548 n = 856	1,200 n = 262
B. NUMBER OF CLASSROOMS *(Fill in the number of classrooms included in the centers by program type.)*	10,059 n = 843	2,866 n = 259
C. NUMBER OF DAYS OF CLASSROOM OPERATION OR CHILD CONTACT - FULL DAY PROGRAMS ONLY *(A day of classroom operation or child contact is a day in which Head Start services are provided. Part Day Programs fill in Item E.)*		--------
D. NUMBER OF HOURS OF CLASSROOM OPERATION PER DAY - FULL DAY PROGRAMS ONLY *(Fill in the number of hours classrooms were in operation with children in attendance. Part Day Programs fill in Item F.)*		-------
E. NUMBER OF DAYS OF CLASSROOM OPERATION OR CHILD CONTACT BY PROGRAM MODE - PART DAY PROGRAMS ONLY		
1. STANDARD HEAD START MODEL *(Fill in the number of days classrooms were in operation during this operating period.)*	--------	
2. VARIATIONS IN CENTER ATTENDANCE *(Fill in the number of days classrooms were in operation during this operating period.)*	--------	
3. DOUBLE SESSION *(Fill in the number of days of classroom operation during this operating period. Count a morning and afternoon session as ONE day.)*	--------	
4. HOME BASED MODELS *(Add the number of days of activities planned for a child. For example, if you operate your program for 40 weeks you have: 1 visit per week by Home Visitor = 40 visits, 1 parent meeting bi-weekly = 20 meetings, 1 classroom day per child week = 40 classroom days. Total Activities = 100.)*	--------	
5. LOCALLY DESIGNED OPTIONS *(Fill in the number of days classrooms were in operation during this operating period.)*	--------	
F. NUMBER OF HOURS OF CLASSROOM OPERATION PER DAY - PART DAY PROGRAMS ONLY *(Fill in the number of hours classrooms were in operation with children in attendance. Do not include any information for Home Based Models.)*	--------	
15. HEALTH SERVICES INFORMATION		
A. MEDICAL SERVICES *(Number of children enrolled refers to all children served during the operating period.)*		
1. NUMBER OF CHILDREN ENROLLED WHO HAVE COMPLETED MEDICAL SCREENING	216,509 n = 853	59,279 n = 253
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT	59,617 n=831	12,840 n=242
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT	61,183 n=826	15,031 n=242
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED MEDICAL SERVICES REIMBURSED BY MEDICAID (EPSDT)	62,729 n = 816	12,490 n = 239
B. DENTAL SERVICES *(Number of children enrolled refers to all children served during the operating period.)*		
1. NUMBER OF CHILDREN ENROLLED WHO HAVE COMPLETED DENTAL SCREENING	196,727 n = 851	58,270 n = 249
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT	99,920 n=836	21,311 n=246
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT	94,348 n=834	19,355 n=244
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED DENTAL SERVICES REIMBURSED BY MEDICAID (EPSDT)	51,382 n = 810	9,043 n = 235
C. MENTAL HEALTH SERVICES *(Number of children enrolled refers to all children served during the operating period.)*		
1. NUMBER OF CHILDREN ENROLLED, WITH OBSERVED ATYPICAL BEHAVIOR, WHO HAVE COMPLETED MENTAL HEALTH SCREENING	60,984 n = 822	11,493 n = 245
a. NUMBER OF CHILDREN ENROLLED NEEDING TREATMENT	11,633 n=817	2,629 n=247
b. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED TREATMENT	10,539 n=818	2,387 n=247
2. NUMBER OF CHILDREN ENROLLED WHO HAVE RECEIVED MENTAL HEALTH SERVICES REIMBURSED BY MEDICAID (EPSDT)	3,014 n = 780	435 n = 232

REPORTED TOTALS

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
16. ENROLLMENT INFORMATION *(With exception of Item 16 A., all of the data requested refers to the number of children served. This means you should count every child enrolled in your program during the entire operating period whether or not that child stayed in the program the entire period.)*		
A. PLANNED ENROLLMENT 1. NUMBER OF CHILDREN WHO ARE FUNDED BY CYF *(Enter the number of children you agreed to serve in your CYF Head Start grant(s).)*	207,458 n = 856	52,619 n = 261
2. NUMBER OF ADDITIONAL CHILDREN WHO ARE FUNDED BY OTHER SOURCES *(Enter the number of additional children you are able to serve by use of other sources of funds.)*	8,179 n = 857	3,448 n = 261
3. TOTAL PLANNED ENROLLMENT *(Enter the total of Items 1 and 2)*	215,757 n=857	56,046 n=261
4. AVERAGE DAILY ATTENDANCE *(Enter as percentage of TOTAL PLANNED ENROLLMENT. To calculate, add each day's attendance during this operating period, and divide this total by the number of days during which your classrooms operated. This result should then be divided by Item 3 (TOTAL PLANNED ENROLLMENT) and multiplied by 100 to give a percentage figure.) Exclude HOME BASED MODELS.*	--------	--------
B. ENROLLMENT REQUIREMENTS 1. NUMBER OF CHILDREN ABOVE POVERTY LEVEL	15,401 n = 836	4,558 n = 255
HOW MANY OF THESE CHILDREN ARE HANDICAPPED	4,062 n=827	833 n=257
2. NUMBER OF CHILDREN AT OR BELOW POVERTY LEVEL	210,036 n=834	52,552 n=254
HOW MANY OF THESE CHILDREN ARE HANDICAPPED	24,425 n=823	5,844 n=251
C. LENGTH OF ENROLLMENT 1. NUMBER OF CHILDREN IN THEIR FIRST YEAR OF HEAD START	177,440 n = 850	33,193 n = 252
2. NUMBER OF CHILDREN IN THEIR SECOND & SUBSEQUENT YEARS	55,536 n=849	26,379 n=254
3. TOTAL NUMBER OF ENROLLED CHILDREN *(Sum of Items 1 and 2)*	235,317 n=855	60,719 n=260
4. NUMBER OF CHILDREN WHO DROPPED OUT THIS YEAR *NOTE: Because these items refer to all children served during the operating year, you should be able to subtract Item 4 from Item 3 and your answer will reflect the number of children in your program at the end of your operations for this operating period.*	38,060 n = 830	11,300 n = 247
D. RACE/ETHNIC COMPOSITION OF ENROLLED CHILDREN *(Refer to question 8 for Race/Ethnic group definitions.)* 1. WHITE	83,526 n = 850	12,034 n = 261
2. BLACK	98,597 n=852	32,716 n=261
3. HISPANIC a. MEXICAN	20,957 n = 850	9,669 n = 261
b. PUERTO RICAN	15,707 n=850	1,017 n=261
c. OTHER	2,257 n=851	911 n=261
4. ASIAN OR PACIFIC ISLANDER	3,406 n=852	368 n=261
5. AMERICAN INDIAN OR ALASKAN NATIVE	7,297 n=851	3,724 n=261
6. TOTAL NUMBER OF ENROLLED CHILDREN *(Should be the same number as in Item C-3)*	233,871 n = 853	60,465 n = 260
E. AGE COMPOSITION OF ENROLLED CHILDREN *(Use the age of the child at the beginning of this operating period. For children enrolled during this operating period, use the age at time of enrollment.)* 1. 3 YEARS OLD AND YOUNGER	41,337 n = 853	16,706 n = 259
2. 4 YEARS OLD	134,352 n=853	28,617 n=259
3. 5 YEARS OLD	55,201 n=852	12,947 n=259
4. 6 YEARS OLD AND OLDER	2,324 n=853	1,164 n=260
5. TOTAL NUMBER OF ENROLLED CHILDREN *(Should be the same number as in Item C-3)*	234,195 n = 852	60,417 n = 260

REPORTED TOTALS

	PART DAY PROGRAM (ACCOUNT NO. 22)	FULL DAY PROGRAM (ACCOUNT NO. 23)
16. ENROLLMENT INFORMATION *(Continued)*		
F. ENROLLMENT BY PROGRAM MODE - PART DAY PROGRAMS ONLY *(If you are operating with two of these models serving the same group of children, please enter the number of children enrolled in the program model described in the work program of your approved grant application.)*		
1. STANDARD HEAD START MODEL	127,946 n = 853	
2. VARIATIONS IN CENTER ATTENDANCE	38,923 n=854	
3. DOUBLE SESSIONS	40,905 n=855	
4. HOME BASED MODELS	10,002 n=850	
5. LOCALLY DESIGNED OPTIONS	6,910 n=857	
17. FOOD SERVICE INFORMATION		
A. AVERAGE NUMBER OF CHILDREN FED PER DAY *(A separate figure should be calculated and entered for each Item. To calculate add the number of children fed breakfast (or lunch, or supper, or snacks) each day during March and April of this year, and divide the total by the number of days of classroom operation during that period.)*		
1. AVERAGE NUMBER OF CHILDREN FED BREAKFAST	110,760 n = 850	37,623 n = 253
2. AVERAGE NUMBER OF CHILDREN FED LUNCH	171,560 n=846	45,882 n=255
3. AVERAGE NUMBER OF CHILDREN FED SUPPER	2,038 n=850	386 n=256
4. AVERAGE NUMBER OF CHILDREN FED SNACKS	140,493 n=847	46,503 n=256
B. TOTAL COST OF FOOD PURCHASES (Enter the amounts paid out of OCD funds and the amounts reimbursed by USDA so that the total of Items 1 and 2 will reflect the total amount spent for food during the operating period. If you have not completed your operating period, please estimate those costs which you anticipate you will incur during the remainder of the operating period.)		
1. FOOD PURCHASES PAID OUT OF CYF FUNDS AND NOT REIMBURSED BY USDA	$ 4,184,033 n = 816	1,279,504 n = 236
2. FOOD PURCHASES REIMBURSED, OR TO BE REIMBURSED, BY USDA	$17,588,912 n= 814	$ 6,509,928 n= 234
3. FOOD PURCHASES PAID FROM OTHER SOURCES	$ 21,781,776 n = 814	$ 7,789,472 n = 234
18. SOCIAL SERVICES INFORMATION		
A. NUMBER OF FAMILIES PROVIDED DIRECT SERVICES *('Direct Services' are those provided by the Head Start program.)*	162,228 n = 848	42,645 n = 252
B. NUMBER OF FAMILIES REFERRED TO OTHER AGENCIES	76,567 n=838	18,160 n=246
C. NUMBER OF FAMILIES REFERRED TO OTHER AGENCIES WITH FOLLOW-UP BY HEAD START	83,422 n=838	15,207 n=246
19. PARENT INVOLVEMENT INFORMATION *(If you have records on these items, enter the numbers contained in your records. If you did not keep records but feel that you can make a reasonably accurate estimate, enter your estimate with an 'E' after it. If neither of the above can be provided, place an 'NA' in the column indicating that this information is not available.)*		
A. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING POLICY COUNCIL OR POLICY COMMITTEE MEETINGS	26,445 n = 831	6,355 n = 246
B. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING EDUCATIONAL ACTIVITIES CONDUCTED BY YOUR PROGRAM	58,506 n = 822	13,125 n = 248
C. AVERAGE NUMBER OF HEAD START PARENTS ATTENDING RECREATIONAL ONLY ACTIVITIES CONDUCTED BY YOUR PROGRAM	76,739 n = 801	18,069 n = 241
D. NUMBER OF HEAD START PARENTS PARTICIPATING IN ADULT EDUCATION *(e.g. GED, College or Vocational School, etc.)*	14,700 n = 808	5,039 n = 249

SPECIAL INSTRUCTIONS FOR GRANTEES WHICH MAINTAIN CYF-FUNDED CENTRAL OFFICE STAFF ONLY:

Grantees which do not directly operate a Head Start program but do maintain a CYF-funded, cental offfice staff to assist delegate agencies in their program operations, are requested to provide data about those staff and their activities. In addition to providing necessary identifying information in questions 1, 2, 3, 6 & 7, on the first page, these grantees should answer questions 8 through 13.

Questions 8 & 9 - *Data should be entered according to the program account from which staff are paid.*

Questions 10 & 11 - *For grantees which do not operate programs, program account numbers are not applicable for these questions. If central staff does include, however, any staff paid by other Federal programs, or receives volunteer services, these data should be entered in the Full Day Program, Account 23 column for consistency in reporting.*

Question 12 - *Enter the amount of the CYF grant allocated for central office staff.*

Question 13 - *For 13A & 13C, enter the costs for central office staff according to the appropriate sources from which those costs were paid or will be paid. Omit 13B.*

DEFINITION OF EARLY CHILDHOOD EDUCATION DEGREE *(For question 9B):*

Baccalaureate or higher degree with a major in early childhood education and a minimum of 12 weeks supervised field experience. Teacher training institutions and departments of family studies or home economics (human ecology) offer a major in early childhood education in one of, or a combination of, the following ways: preschool education, nursery school education, pre-kindergarten education, or elementary education with a major in early childhood.

NOTE: *No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations.*

Section 517(c) of Public Law 93-644

COMMENTS *(Use back if necessary):*

APPENDIX H

REPORTED TOTALS AND MEANS ON SELECTED VARIABLES, BY STATE

Appendix H presents reported totals, means, and number of valid cases on eleven selected variables by state and U.S. territories where there are Head Start programs.

The reported totals presented represent the sum of all the valid cases for that particular state or territory. No compensation has been made for missing values or for non-reporting grantees, thereby hindering direct comparisons across the different totals.

The tables presented are as follows:

- Table H-1: Head Start Children in Poverty by State.
- Table H-2: ACYF-Paid Staff by State.
- Table H-3: Total Staff Paid by Other Sources by State.
- Table H-4: Planned Enrollment by State.
- Table H-5: Actual Enrollment by State.
- Table H-6: Head Start Centers by State.
- Table H-7: Head Start Classrooms by State.
- Table H-8: ACYF Funding by State.
- Table H-9: ACYF Handicapped Funding by State.
- Table H-10: USDA Reimbusement by State.
- Table H-11: Total Revenue by State.

TABLE H-1

HEAD START CHILDREN IN POVERTY BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	262,039	277	947
1. ALABAMA	7,619	331	23
2. ALASKA	640	160	4
3. ARIZONA	5,348	315	17
4. ARKANSAS	5,688	299	19
5. CALIFORNIA	18,298	457	40
6. COLORADO	3,904	195	20
7. CONNECTICUT	1,717	191	9
8. DELAWARE	669	223	3
9. DISTRICT OF COLUMBIA	1,712	856	2
10. FLORIDA	9,227	355	26
11. GEORGIA	4,341	241	18
12. HAWAII	1,145	286	4
13. IDAHO	1,171	98	12
14. ILLINOIS	11,659	530	22
15. INDIANA	4,114	179	23
16. IOWA	2,778	174	16
17. KANSAS	2,147	179	12
18. KENTUCKY	6,956	232	30
19. LOUISIANA	6,850	298	23
20. MAINE	1,336	95	14
21. MARYLAND	2,670	191	14
22. MASSACHUSETTS	4,361	198	22
23. MICHIGAN	6,736	306	22
24. MINNESOTA	3,676	123	30
25. MISSISSIPPI	22,478	977	23
26. MISSOURI	9,256	544	17
27. MONTANA	1,381	99	14
28. NEBRASKA	1,273	127	10
29. NEVADA	422	106	4
30. NEW HAMPSHIRE	626	104	6
31. NEW JERSEY	4,939	274	18
32. NEW MEXICO	3,562	178	20
33. NEW YORK	13,969	291	48
34. NORTH CAROLINA	8,183	227	36
35. NORTH DAKOTA	850	106	8
36. OHIO	9,948	243	41
37. OKLAHOMA	5,774	289	20
38. OREGON	1,911	136	14
39. PENNSYLVANIA	7,067	172	41
40. RHODE ISLAND	813	102	8
41. SOUTH CAROLINA	5,104	365	14
42. SOUTH DAKOTA	1,085	108	10
43. TENNESSEE	5,784	482	12
44. TEXAS	16,187	330	49
45. UTAH	1,494	213	7
46. VERMONT	268	134	2
47. VIRGINIA	3,043	145	21
48. WASHINGTON	2,385	95	25
49. WEST VIRGINIA	3,212	189	17
50. WISCONSIN	3,254	136	24
51. WYOMING	649	130	5
52. GUAM	120	120	1
53. PUERTO RICO	10,555	5,278	2
54. TRUST TERRITORY	825	206	4
55. VIRGIN ISLANDS	860	860	1

TABLE H-2

ACYF-PAID STAFF BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	49,930	52.2	956
1. ALABAMA	1,862	77.6	24
2. ALASKA	135	33.8	4
3. ARIZONA	983	54.6	18
4. ARKANSAS	787	41.4	19
5. CALIFORNIA	3,221	80.5	40
6. COLORADO	792	39.6	20
7. CONNECTICUT	359	39.9	9
8. DELAWARE	128	42.7	3
9. DISTRICT OF COLUMBIA	246	123.0	2
10. FLORIDA	1,657	63.7	26
11. GEORGIA	900	50.0	18
12. HAWAII	215	53.8	4
13. IDAHO	277	23.1	12
14. ILLINOIS	1,406	58.6	24
15. INDIANA	694	30.2	23
16. IOWA	592	37.0	16
17. KANSAS	486	44.2	11
18. KENTUCKY	1,302	44.9	29
19. LOUISIANA	1,203	52.3	23
20. MAINE	329	23.5	14
21. MARYLAND	588	39.2	15
22. MASSACHUSETTS	963	43.8	22
23. MICHIGAN	829	34.5	24
24. MINNESOTA	666	22.2	30
25. MISSISSIPPI	5,045	219.3	23
26. MISSOURI	1,583	93.1	17
27. MONTANA	334	22.3	15
28. NEBRASKA	364	30.3	12
29. NEVADA	76	19.0	4
30. NEW HAMPSHIRE	186	31.0	6
31. NEW JERSEY	1,137	63.2	18
32. NEW MEXICO	518	27.3	19
33. NEW YORK	2,754	61.2	45
34. NORTH CAROLINA	1,524	41.2	37
35. NORTH DAKOTA	200	25.0	8
36. OHIO	1,674	44.1	38
37. OKLAHOMA	1,230	53.5	23
38. OREGON	408	27.2	15
39. PENNSYLVANIA	1,509	38.7	39
40. RHODE ISLAND	113	16.1	7
41. SOUTH CAROLINA	897	59.8	15
42. SOUTH DAKOTA	248	24.8	10
43. TENNESSEE	1,178	73.6	16
44. TEXAS	2,459	48.2	51
45. UTAH	308	44.0	7
46. VERMONT	13	13.0	1
47. VIRGINIA	781	37.2	21
48. WASHINGTON	454	18.9	24
49. WEST VIRGINIA	675	37.5	18
50. WISCONSIN	650	26.0	25
51. WYOMING	119	29.8	4
52. GUAM	17	17.0	1
53. PUERTO RICO	2,557	1,278.5	2
54. TRUST TERRITORY	151	37.8	4
55. VIRGIN ISLANDS	148	148.0	1

TABLE H-3

TOTAL STAFF PAID BY OTHER SOURCES BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	4,881	5.39	906
1. ALABAMA	71	2.96	24
2. ALASKA	8	2.00	4
3. ARIZONA	65	3.82	17
4. ARKANSAS	130	6.84	19
5. CALIFORNIA	275	7.24	38
6. COLORADO	50	2.78	18
7. CONNECTICUT	79	9.88	8
8. DELAWARE	39	13.00	3
9. DISTRICT OF COLUMBIA	41	20.50	2
10. FLORIDA	66	2.54	26
11. GEORGIA	210	13.12	16
12. HAWAII	0	0.00	4
13. IDAHO	23	1.92	12
14. ILLINOIS	97	4.04	24
15. INDIANA	66	2.87	23
16. IOWA	29	2.07	14
17. KANSAS	138	12.55	11
18. KENTUCKY	107	3.96	27
19. LOUISIANA	53	2.65	20
20. MAINE	42	3.50	12
21. MARYLAND	113	7.53	15
22. MASSACHUSETTS	91	4.14	22
23. MICHIGAN	157	7.14	22
24. MINNESOTA	61	2.10	29
25. MISSISSIPPI	159	7.57	21
26. MISSOURI	12	0.75	16
27. MONTANA	34	2.62	13
28. NEBRASKA	21	1.91	11
29. NEVADA	11	2.75	4
30. NEW HAMPSHIRE	7	1.75	4
31. NEW JERSEY	83	4.88	17
32. NEW MEXICO	76	4.22	18
33. NEW YORK	446	10.37	43
34. NORTH CAROLINA	143	4.09	35
35. NORTH DAKOTA	49	6.12	8
36. OHIO	186	4.89	38
37. OKLAHOMA	86	3.91	22
38. OREGON	47	3.36	14
39. PENNSYLVANIA	172	4.53	38
40. RHODE ISLAND	17	2.83	6
41. SOUTH CAROLINA	68	4.53	15
42. SOUTH DAKOTA	24	2.67	9
43. TENNESSEE	98	7.00	14
44. TEXAS	352	7.18	49
45. UTAH	36	5.14	7
46. VERMONT	3	3.00	1
47. VIRGINIA	52	2.89	18
48. WASHINGTON	101	4.21	24
49. WEST VIRGINIA	27	1.69	16
50. WISCONSIN	68	2.96	23
51. WYOMING	6	1.50	4
52. GUAM	5	5.00	1
53. PUERTO RICO	394	197.00	2
54. TRUST TERRITORY	38	9.50	4
55. VIRGIN ISLANDS	49	49.00	1

TABLE H-4

PLANNED ENROLLMENT BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	271,447	278	975
1. ALABAMA	8,213	342	24
2. ALASKA	838	210	4
3. ARIZONA	5,253	292	18
4. ARKANSAS	5,120	269	19
5. CALIFORNIA	17,029	426	40
6. COLORADO	4,034	202	20
7. CONNECTICUT	1,983	220	9
8. DELAWARE	695	232	3
9. DISTRICT OF COLUMBIA	1,652	826	2
10. FLORIDA	9,344	359	26
11. GEORGIA	5,619	312	18
12. HAWAII	1,000	250	4
13. IDAHO	1,157	96	12
14. ILLINOIS	10,112	421	24
15. INDIANA	4,109	171	24
16. IOWA	2,931	183	16
17. KANSAS	2,377	198	12
18. KENTUCKY	8,123	262	31
19. LOUISIANA	6,971	303	23
20. MAINE	1,464	105	14
21. MARYLAND	2,802	200	14
22. MASSACHUSETTS	4,694	213	22
23. MICHIGAN	7,665	307	25
24. MINNESOTA	3,894	130	30
25. MISSISSIPPI	24,670	1,073	23
26. MISSOURI	8,371	492	17
27. MONTANA	1,534	102	15
28. NEBRASKA	1,532	128	12
29. NEVADA	453	113	4
30. NEW HAMPSHIRE	651	108	6
31. NEW JERSEY	5,352	297	18
32. NEW MEXICO	3,839	192	20
33. NEW YORK	13,370	279	48
34. NORTH CAROLINA	8,373	233	36
35. NORTH DAKOTA	908	114	8
36. OHIO	10,072	246	41
37. OKLAHOMA	7,028	306	23
38. OREGON	2,270	151	15
39. PENNSYLVANIA	7,332	179	41
40. RHODE ISLAND	835	104	8
41. SOUTH CAROLINA	5,466	364	15
42. SOUTH DAKOTA	1,235	124	10
43. TENNESSEE	6,703	447	15
44. TEXAS	16,485	317	52
45. UTAH	1,647	235	7
46. VERMONT	275	138	2
47. VIRGINIA	3,551	154	23
48. WASHINGTON	2,282	91	25
49. WEST VIRGINIA	3,482	193	18
50. WISCONSIN	3,743	144	26
51. WYOMING	581	116	5
52. GUAM	120	120	1
53. PUERTO RICO	10,446	5.223	2
54. TRUST TERRITORY	893	223	4
55. VIRGIN ISLANDS	869	869	1

TABLE H-5
ACTUAL ENROLLMENT BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	294,383	303	972
1. ALABAMA	8,571	357	24
2. ALASKA	847	212	4
3. ARIZONA	5,877	326	18
4. ARKANSAS	6,340	334	19
5. CALIFORNIA	19,420	486	40
6. COLORADO	4,541	227	20
7. CONNECTICUT	2,005	223	9
8. DELAWARE	731	244	3
9. DISTRICT OF COLUMBIA	1,499	750	2
10. FLORIDA	9,901	381	26
11. GEORGIA	5,554	327	17
12. HAWAII	1,220	305	4
13. IDAHO	1,375	115	12
14. ILLINOIS	12,518	522	24
15. INDIANA	4,513	188	24
16. IOWA	3,039	190	16
17. KANSAS	2,484	207	12
18. KENTUCKY	8,732	282	31
19. LOUISIANA	8,061	350	23
20. MAINE	1,623	116	14
21. MARYLAND	2,943	210	14
22. MASSACHUSETTS	4,819	229	21
23. MICHIGAN	7,706	321	24
24. MINNESOTA	4,130	138	30
25. MISSISSIPPI	24,998	1,087	23
26. MISSOURI	9,806	577	17
27. MONTANA	1,731	115	15
28. NEBRASKA	1,658	138	12
29. NEVADA	450	112	4
30. NEW HAMPSHIRE	661	110	6
31. NEW JERSEY	5,921	329	18
32. NEW MEXICO	4,048	202	20
33. NEW YORK	15,945	332	48
34. NORTH CAROLINA	9,275	251	37
35. NORTH DAKOTA	931	116	8
36. OHIO	10,767	263	41
37. OKLAHOMA	7,637	332	23
38. OREGON	2,182	145	15
39. PENNSYLVANIA	7,676	192	40
40. RHODE ISLAND	862	108	8
41. SOUTH CAROLINA	5,710	381	15
42. SOUTH DAKOTA	1,207	121	10
43. TENNESSEE	7,125	475	15
44. TEXAS	19,465	367	53
45. UTAH	1,655	236	7
46. VERMONT	312	156	2
47. VIRGINIA	3,588	156	23
48. WASHINGTON	2,625	105	25
49. WEST VIRGINIA	3,598	200	18
50. WISCONSIN	2,808	112	25
51. WYOMING	688	138	5
52. GUAM	123	123	1
53. PUERTO RICO	10,691	5,346	2
54. TRUST TERRITORY	877	219	4
55. VIRGIN ISLANDS	914	914	1

TABLE H-6

HEAD START CENTERS BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	6,739	6.90	976
1. ALABAMA	133	5.54	24
2. ALASKA	22	5.50	4
3. ARIZONA	177	9.83	18
4. ARKANSAS	136	7.16	19
5. CALIFORNIA	481	12.02	40
6. COLORADO	96	4.80	20
7. CONNECTICUT	60	6.67	9
8. DELAWARE	11	3.67	3
9. DISTRICT OF COLUMBIA	39	19.50	2
10. FLORIDA	183	7.04	26
11. GEORGIA	104	5.78	18
12. HAWAII	48	12.00	4
13. IDAHO	24	2.00	12
14. ILLINOIS	223	9.29	24
15. INDIANA	102	4.25	24
16. IOWA	99	6.19	16
17. KANSAS	53	4.42	12
18. KENTUCKY	227	7.32	31
19. LOUISIANA	128	5.57	23
20. MAINE	64	4.57	14
21. MARYLAND	105	7.00	15
22. MASSACHUSETTS	109	4.95	22
23. MICHIGAN	196	7.84	25
24. MINNESOTA	150	5.00	30
25. MISSISSIPPI	318	13.83	23
26. MISSOURI	232	13.65	17
27. MONTANA	40	2.67	15
28. NEBRASKA	48	4.00	12
29. NEVADA	14	3.50	4
30. NEW HAMPSHIRE	26	4.33	6
31. NEW JERSEY	150	8.82	17
32. NEW MEXICO	93	4.65	20
33. NEW YORK	238	4.96	48
34. NORTH CAROLINA	218	5.89	37
35. NORTH DAKOTA	22	2.75	8
36. OHIO	256	6.40	40
37. OKLAHOMA	217	9.43	23
38. OREGON	51	3.40	15
39. PENNSYLVANIA	239	5.83	41
40. RHODE ISLAND	19	2.38	8
41. SOUTH CAROLINA	90	6.00	15
42. SOUTH DAKOTA	43	4.30	10
43. TENNESSEE	153	9.56	16
44. TEXAS	320	6.04	53
45. UTAH	42	6.00	7
46. VERMONT	10	5.00	2
47. VIRGINIA	108	4.70	23
48. WASHINGTON	66	2.64	25
49. WEST VIRGINIA	130	7.65	17
50. WISCONSIN	98	3.77	26
51. WYOMING	20	4.00	5
52. GUAM	5	5.00	1
53. PUERTO RICO	444	222.00	2
54. TRUST TERRITORY	32	8.00	4
55. VIRGIN ISLANDS	27	27.00	1

TABLE H-7

HEAD START CLASSROOMS BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	12,850	13.37	961
1. Alabama	413	17.21	24
2. Alaska	26	6.50	4
3. Arizona	253	14.06	18
4. Arkansas	242	13.44	18
5. California	924	23.10	40
6. Colorado	208	10.40	20
7. Connecticut	81	9.00	9
8. Delaware	32	10.67	3
9. District of Columbia	90	45.00	2
10. Florida	452	17.38	26
11. Georgia	260	14.44	18
12. Hawaii	52	13.00	4
13. Idaho	54	4.50	12
14. Illinois	320	13.91	23
15. Indiana	187	8.13	23
16. Iowa	145	9.06	16
17. Kansas	104	8.67	12
18. Kentucky	395	12.74	31
19. Louisiana	357	15.52	23
20. Maine	67	5.15	13
21. Maryland	167	11.13	15
22. Massachusetts	233	10.59	22
23. Michigan	372	14.88	25
24. Minnesota	199	6.86	29
25. Mississippi	1,033	46.95	22
26. Missouri	292	18.25	16
27. Montana	78	5.20	15
28. Nebraska	65	5.42	12
29. Nevada	21	5.25	4
30. New Hampshire	34	5.67	6
31. New Jersey	216	12.71	17
32. New Mexico	179	9.42	19
33. New York	548	11.42	48
34. North Carolina	397	10.73	37
35. North Dakota	52	7.43	7
36. Ohio	466	11.95	39
37. Oklahoma	352	15.30	23
38. Oregon	97	6.47	15
39. Pennsylvania	376	9.17	41
40. Rhode Island	45	5.62	8
41. South Carolina	241	17.21	14
42. South Dakota	56	5.60	10
43. Tennessee	309	20.60	15
44. Texas	833	15.72	53
45. Utah	74	10.57	7
46. Vermont	15	7.50	2
47. Virginia	204	9.27	22
48. Washington	111	4.62	24
49. West Virginia	171	10.06	17
50. Wisconsin	176	7.04	25
51. Wyoming	34	6.80	5
52. Guam	7	7.00	1
53. Puerto Rico	651	325.50	2
54. Trust Territory	52	13.00	4
55. Virgin Islands	32	32.00	1

TABLE H-8

ACYF FUNDING BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	$360,339,838	$ 382,933	941
1. ALABAMA	10,739,962	447,498	24
2. ALASKA	1,777,707	444,427	4
3. ARIZONA	7,175,003	398,611	18
4. ARKANSAS	5,620,979	312,277	18
5. CALIFORNIA	23,964,905	599,123	40
6. COLORADO	6,691,080	334,554	20
7. CONNECTICUT	2,090,065	232,229	9
8. DELAWARE	996,294	498,147	2
9. DISTRICT OF COLUMBIA	4,041,475	2,020,738	2
10. FLORIDA	13,732,494	528,173	26
11. GEORGIA	6,528,363	362,687	18
12. HAWAII	1,890,692	472,673	4
13. IDAHO	1,692,451	141,038	12
14. ILLINOIS	15,941,570	664,232	24
15. INDIANA	4,309,735	195,897	22
16. IOWA	3,717,793	232,362	16
17. KANSAS	3,617,742	328,886	11
18. KENTUCKY	6,950,667	257,432	27
19. LOUISIANA	9,471,886	411,821	23
20. MAINE	2,006,744	143,339	14
21. MARYLAND	5,218,166	347,878	15
22. MASSACHUSETTS	7,223,989	328,363	22
23. MICHIGAN	5,139,732	244,749	21
24. MINNESOTA	4,356,968	155,606	28
25. MISSISSIPPI	32,929,694	1,431,726	23
26. MISSOURI	9,643,874	567,287	17
27. MONTANA	2,311,195	154,080	15
28. NEBRASKA	1,984,907	165,409	12
29. NEVADA	803,136	200,784	4
30. NEW HAMPSHIRE	1,060,915	176,819	6
31. NEW JERSEY	8,682,280	510,722	17
32. NEW MEXICO	3,620,843	190,571	19
33. NEW YORK	23,328,837	530,201	44
34. NORTH CAROLINA	11,558,240	312,385	37
35. NORTH DAKOTA	1,323,950	165,494	8
36. OHIO	12,091,993	326,811	37
37. OKLAHOMA	7,400,614	321,766	23
38. OREGON	2,595,714	173,048	15
39. PENNSYLVANIA	13,098,924	327,473	40
40. RHODE ISLAND	600,596	100,099	6
41. SOUTH CAROLINA	7,132,213	475,481	15
42. SOUTH DAKOTA	1,498,068	149,807	10
43. TENNESSEE	8,372,114	523,257	16
44. TEXAS	18,638,793	365,467	51
45. UTAH	1,949,124	278,446	7
46. VERMONT	84,226	84,226	1
47. VIRGINIA	5,847,778	278,466	21
48. WASHINGTON	2,990,179	124,591	24
49. WEST VIRGINIA	4,061,823	253,864	16
50. WISCONSIN	4,356,910	174,276	25
51. WYOMING	668,273	167,068	4
52. GUAM	180,755	180,755	1
53. PUERTO RICO	15,583,647	7,791,824	2
54. TRUST TERRITORY	431,052	107,763	4
55. VIRGIN ISLANDS	612,704	612,704	1

TABLE H-9

ACYF HANDICAPPED FUNDING BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	$12,602,476	$ 14,452	872
1. ALABAMA	523,069	21,795	24
2. ALASKA	57,107	14,277	4
3. ARIZONA	451,361	25,076	18
4. ARKANSAS	209,578	13,972	15
5. CALIFORNIA	419,959	11,999	35
6. COLORADO	404,708	20,235	20
7. CONNECTICUT	95,712	11,964	8
8. DELAWARE	17,593	8,796	2
9. DISTRICT OF COLUMBIA	50,537	25,268	2
10. FLORIDA	524,110	20,158	26
11. GEORGIA	313,743	17,430	18
12. HAWAII	64,639	16,160	4
13. IDAHO	67,603	6,146	11
14. ILLINOIS	195,894	8,517	23
15. INDIANA	102,174	4,644	22
16. IOWA	126,640	9,046	14
17. KANSAS	171,209	17,121	10
18. KENTUCKY	405,770	15,029	27
19. LOUISIANA	304,404	15,220	20
20. MAINE	64,073	5,339	12
21. MARYLAND	222,856	17,143	13
22. MASSACHUSETTS	260,697	13,035	20
23. MICHIGAN	262,193	13,800	19
24. MINNESOTA	212,522	8,174	26
25. MISSISSIPPI	830,908	37,769	22
26. MISSOURI	326,791	21,786	15
27. MONTANA	101,368	7,241	14
28. NEBRASKA	54,379	4,944	11
29. NEVADA	23,570	5,892	4
30. NEW HAMPSHIRE	71,937	11,990	6
31. NEW JERSEY	184,889	10,272	18
32. NEW MEXICO	109,178	7,798	14
33. NEW YORK	478,157	11,385	42
34. NORTH CAROLINA	511,360	14,610	35
35. NORTH DAKOTA	74,548	9,318	8
36. OHIO	390,669	11,162	35
37. OKLAHOMA	534,659	29,703	18
38. OREGON	98,771	7,598	13
39. PENNSYLVANIA	395,833	10,417	38
40. RHODE ISLAND	38,758	6,460	6
41. SOUTH CAROLINA	261,434	18,674	14
42. SOUTH DAKOTA	54,181	6,020	9
43. TENNESSEE	628,032	41,869	15
44. TEXAS	706,875	15,367	46
45. UTAH	87,931	14,655	6
46. VERMONT	14,483	14,483	1
47. VIRGINIA	122,971	7,686	16
48. WASHINGTON	155,995	7,091	22
49. WEST VIRGINIA	151,391	9,462	16
50. WISCONSIN	273,726	11,901	23
51. WYOMING	30,385	7,596	4
52. GUAM	5,460	5,460	1
53. PUERTO RICO	311,626	155,813	2
54. TRUST TERRITORY	15,560	3,890	4
55. VIRGIN ISLANDS	28,500	28,500	1

TABLE H-10

USDA REIMBURSEMENT BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	$29,187,731	$31,795	918
1. Alabama	1,205,737	50,239	24
2. Alaska	224,381	56,095	4
3. Arizona	424,320	26,520	16
4. Arkansas	715,056	39,725	18
5. California	1,888,626	51,044	37
6. Colorado	521,264	26,063	20
7. Connecticut	157,761	19,720	8
8. Delaware	67,020	33,510	2
9. District of Columbia	175,579	87,790	2
10. Florida	1,061,369	44,224	24
11. Georgia	625,772	36,810	17
12. Hawaii	102,271	25,568	4
13. Idaho	73,836	6,153	12
14. Illinois	883,094	38,395	23
15. Indiana	269,552	11,720	23
16. Iowa	288,603	18,038	16
17. Kansas	247,247	22,477	11
18. Kentucky	826,808	31,800	26
19. Louisiana	1,061,262	46,142	23
20. Maine	142,001	10,923	13
21. Maryland	354,402	23,627	15
22. Massachusetts	343,861	16,374	21
23. Michigan	288,180	12,530	23
24. Minnesota	206,457	7,373	28
25. Mississippi	4,458,558	193,850	23
26. Missouri	924,928	54,408	17
27. Montana	178,380	12,741	14
28. Nebraska	123,416	10,285	12
29. Nevada	28,526	7,132	4
30. New Hampshire	67,635	11,272	6
31. New Jersey	764,631	42,480	18
32. New Mexico	295,568	15,556	19
33. New York	1,982,070	44,046	45
34. North Carolina	1,113,370	30,927	36
35. North Dakota	74,603	9,325	8
36. Ohio	598,330	17,598	34
37. Oklahoma	911,244	39,619	23
38. Oregon	239,471	17,105	14
39. Pennsylvania	833,958	21,384	39
40. Rhode Island	57,684	8,241	7
41. South Carolina	704,239	46,949	15
42. South Dakota	91,338	9,134	10
43. Tennessee	674,771	42,173	16
44. Texas	1,634,771	33,363	49
45. Utah	63,931	9,133	7
46. Vermont	3,174	3,174	1
47. Virginia	329,373	19,375	17
48. Washington	219,561	9,148	24
49. West Virginia	214,839	15,346	14
50. Wisconsin	246,444	10,268	24
51. Wyoming	58,594	14,648	4
52. Guam	0	0	1
53. Puerto Rico	0	0	2
54. Trust Territory	70,578	17,644	4
55. Virgin Islands	69,287	69,287	1

TABLE H-11
TOTAL REVENUE BY STATE

	REPORTED TOTALS	MEAN	NUMBER OF VALID CASES
TOTALS	$ 472,136,380	$ 568,839	830
1. ALABAMA	15.667.604	652.817	24
2. ALASKA	3,072.504	768.126	4
3. ARIZONA	9,782,267	611.392	16
4. ARKANSAS	6.496.633	499.741	13
5. CALIFORNIA	35,264,860	1.068.632	33
6. COLORADO	9.847.305	492.365	20
7. CONNECTICUT	3.507.931	438.491	8
8. DELAWARE	1.685.986	842.993	2
9. DISTRICT OF COLUMBIA	5.612.551	2.806.276	2
10. FLORIDA	16.019.664	696.507	23
11. GEORGIA	11.172.116	657.183	17
12. HAWAII	2.686.002	671.500	4
13. IDAHO	2.183.266	198.479	11
14. ILLINOIS	23.517.123	1.119.863	21
15. INDIANA	5.561.250	264.821	21
16. IOWA	4,213,281	300.949	14
17. KANSAS	4,050.912	405.091	10
18. KENTUCKY	9.015.546	375.648	24
19. LOUISIANA	11,001,694	550,085	20
20. MAINE	2,460.536	205,045	12
21. MARYLAND	7,719.240	593.788	13
22. MASSACHUSETTS	9,648.436	536.024	18
23. MICHIGAN	5.927.052	370.441	16
24. MINNESOTA	4.708.241	196.177	24
25. MISSISSIPPI	40.835.770	1.944.560	21
26. MISSOURI	8.696.865	579.791	15
27. MONTANA	2.773.718	198.123	14
28. NEBRASKA	1.667.987	166.799	10
29. NEVADA	1.055.193	263.798	4
30. NEW HAMPSHIRE	1.250.904	250.181	5
31. NEW JERSEY	12.763.196	797.700	16
32. NEW MEXICO	3.653.351	281.027	13
33. NEW YORK	31.732.723	813.660	39
34. NORTH CAROLINA	16.015.804	471.055	34
35. NORTH DAKOTA	1.770.080	221.260	8
36. OHIO	15.823.989	465.411	34
37. OKLAHOMA	9.209.042	511.613	18
38. OREGON	4.122.595	317.123	13
39. PENNSYLVANIA	18.455.620	485.674	38
40. RHODE ISLAND	698.084	139.617	5
41. SOUTH CAROLINA	8.917.916	685.994	13
42. SOUTH DAKOTA	1.900.809	211.201	9
43. TENNESSEE	12.720.149	908.582	14
44. TEXAS	20.161.051	458.206	44
45. UTAH	2.118.201	353.034	6
46. VERMONT	141.659	141.659	1
47. VIRGINIA	6.049.702	403.313	15
48. WASHINGTON	4.513.151	205.143	22
49. WEST VIRGINIA	4.829.704	344.979	14
50. WISCONSIN	4.398.685	191.247	23
51. WYOMING	947.498	236.874	4
52. GUAM	284.280	284.280	1
53. PUERTO RICO	22.198.495	11.099.248	2
54. TRUST TERRITORY	630.750	157.688	4
55. VIRGIN ISLANDS	977.409	977.409	1